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08:35:50
         1
                        IN THE UNITED STATES DISTRICT COURT
                        FOR THE EASTERN DISTRICT OF TEXAS
         2
                                 MARSHALL DIVISION
         3
           OPTIS WIRELESS TECHNOLOGY, ) ( CIVIL ACTION NO.
                                         ) ( 2:19-CV-66-JRG
           LLC, OPTIS CELLULAR
           TECHNOLOGY, LLC, PANOPTIS
                                         ) (
           PATENT MANAGEMENT, LLC,
                                         ) (
           UNWIRED PLANET, LLC, UNWIRED ) (
         6
           PLANET INTERNATIONAL LIMITED, ) (
                PLAINTIFFS,
                                          ) (
         7
                                          ) (
           VS.
                                          ) (
         8
                                          ) ( MARSHALL, TEXAS
                                          ) ( AUGUST 5, 2020
           APPLE INC.,
                                          ) ( 8:44 A.M.
                DEFENDANTS.
                                          ) (
        10
                              TRANSCRIPT OF JURY TRIAL
        11
        12
                                   MORNING SESSION
                    BEFORE THE HONORABLE JUDGE RODNEY GILSTRAP
        13
        14
                         UNITED STATES CHIEF DISTRICT JUDGE
        15
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        16
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                      Ms. Shelly Holmes, CSR, TCRR
                       Official Court Reporter
 9
                       United States District Court
                       Eastern District of Texas
10
                       Marshall Division
                       100 E. Houston
11
                       Marshall, Texas 75670
                       (903) 923-7464
12
13
    (Proceedings recorded by mechanical stenography, transcript
14
   produced on a CAT system.)
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PROCEEDINGS
08:44:03
         1
                    (Jury out.)
08:44:03
         2
                    COURT SECURITY OFFICER: All rise.
08:44:04
         3
08:44:05
                    THE COURT: Be seated, please.
         4
                    Are the parties prepared to read into the record
08:44:06
         5
            those items from the list of pre-admitted exhibits which
08:44:13
            were used during yesterday's portion of the trial?
08:44:17
        7
08:44:19
                    MS. SCHUETZ: Yes, Your Honor.
         8
                    THE COURT: Please proceed.
08:44:20
         9
                    MS. SCHUETZ: Good morning, Your Honor. Kelsey
08:44:21
        10
          Schuetz for Plaintiffs.
08:44:29
       11
08:44:30
       12
                    Yesterday, Plaintiffs used the following
            Plaintiffs' exhibit numbers: PX-4, 5, 20, 69, 71, 90, 92,
08:44:34
       13
            125, 128, 136, 601, 1002, 1612, 1760, 1997, 2000, 2002,
08:44:46
       14
       15
            2003, 2004, 2005, 2006, 2007, 2008, 2010, 2013, 2014, 2064,
08:45:05
            2105, 2134, 2329, 2332, 2333, 2334, 2335, 2336, 2337, 2338,
08:45:23
            2339, 2341, 2343, 2348, 2349, 2355, 2358, 2855, and
08:45:48
       17
            Defendant's Trial Exhibit 0524.
08:46:09
       18
                    THE COURT: All right. Any objections to that
08:46:11
       19
08:46:12
       20
            offer from the Plaintiff from Defendant?
08:46:15
       21
                    MR. MUELLER: Your Honor, obviously, I haven't had
       22
            a chance to check all those in light of the chambers
08:46:17
08:46:22
       23
            conference we just had, but I will take counsel's
08:46:22
       24
            representation that they have all been used in slides shown
           to the jury in a substantive fashion.
08:46:27 25
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THE COURT: Do Defendants have a similar rendition
08:46:27
         1
          to offer for the record?
08:46:30
         2
                    MR. POLLINGER: Your Honor, we may have some more.
08:46:32
         3
                    MS. SCHUETZ: Your Honor, we have an additional
08:46:34
           list of exhibits that were used with Madisetti yesterday.
08:46:36
        5
08:46:38
                    THE COURT: All right. Let's hear that addition
        7
           to Plaintiffs' rendition, and then we'll see if Defendant
08:46:41
08:46:44
           have anything to add. Go ahead.
08:46:45
                    MS. SCHUETZ: Okay. They were Plaintiffs' Exhibit
            2, 6, 84, 86, 90, 91, 119, 120, 124, 126, 128, 138, 982,
08:46:48
        10
            1002, 1695, 1760, 2142, 2214, 2308, and 2735.
08:47:06
08:47:20
       12
                    THE COURT: All right. I'll ask again, does
08:47:22
       13
            Defendant have any objection to what's been offered by
           Plaintiff?
08:47:25
       14
08:47:25
       15
                    MR. MUELLER: And, again, Your Honor, same
           position. We have not had a chance to check all these
08:47:26
            slides to confirm that they were substantively used on
08:47:29
       17
08:47:32
       18
            slides shown to the jury even if not listed by name and
08:47:35
       19
            testimony, per Your Honor's guidance.
       20
08:47:37
                    At this point, I will take counsel's
08:47:40
       21
            representation that they were. And we, Your Honor, for our
08:47:42
        22
           part do not have any list of exhibits for today.
08:47:45
       23
                    THE COURT: All right. Well, I made it quite
08:47:48 24
           clear yesterday at the time we recessed that the parties
08:47:51 25
           were to meet and confer overnight and be satisfied as to
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```
what was going to be offered this morning.
08:47:53
         1
08:47:56
                    So I will find that those offered into the record
            were used by Plaintiff and are admitted exhibits for
08:48:00
           purposes of this trial.
08:48:03
                    MS. SCHUETZ: Yes, Your Honor.
08:48:05
         5
08:48:06
                    THE COURT: And I'll expect the parties to fully
         6
            meet and confer so that there is not: I'll take your
08:48:09
            representation because I haven't had time to look at it.
08:48:12
         8
08:48:14
                    That's -- that's not in compliance with the
            instructions I gave last evening. And so I'm going to
08:48:16
        10
08:48:20
       11
            consider, to the extent there is an objection, it's been
08:48:23 12
            waived.
                    Those are admitted exhibits.
08:48:23 13
                    MS. SCHUETZ: Yes, Your Honor.
08:48:25
       14
08:48:26
       15
                    THE COURT: All right. Thank you, counsel.
                    MR. SHEASBY: One quick issue, Your Honor. I know
08:48:27
       16
            that they're going to be able to examine Mr. Madisetti and
08:48:29
       17
            the fact that Dae Won Lee is not coming to trial. I accept
08:48:34
       18
            the consequences of that. Dae Won Lee's testimony was
08:48:38
       19
       20
08:48:40
            produced in this case on the subject of his patent --
08:48:43
       21
                    THE COURT: Speak up, Mr. Sheasby, or go to the
08:48:46
       22
           podium.
                    MR. SHEASBY: I understand they're going to be
08:48:47
       23
08:48:48 24
           able to inquire that Dae Won Lee is not coming to trial,
08:48:52 25
           with Mr. Madisetti. I accept Your Honor's ruling on that.
```

```
I want to make sure that it is not going to incur -- we
08:48:55
         1
            won't be violating anything if Professor Madisetti notes
08:48:57
            that Dae Won Lee's testimony about his patent was produced
08:49:01
         3
            in this case and that he reviewed it.
08:49:04
                    THE COURT: Mr. Madisetti is going to testify
08:49:06
         5
08:49:09
            within the four corners of his report, and as long as he
            testifies within the four corners of his report, he's on
08:49:12
        7
            safe ground.
08:49:16
         8
08:49:16
                    MR. SHEASBY: It is in his report.
08:49:17
        10
                    THE COURT: If he goes outside those four corners,
           he has no ground whatsoever.
08:49:20
        11
        12
08:49:22
                    MR. SHEASBY: I understand your instruction,
08:49:24
       13
           Your Honor. Thank you for your patience.
                    MR. SUMMERSGILL: And, Your Honor, I would just
08:49:25
       14
08:49:27
        15
           note that Mr. Lee's deposition from a different case was
            not in Mr. Madisetti's report -- Dr. Madisetti's report, to
08:49:33
       16
           my knowledge.
08:49:34
        17
                    THE COURT: Well, Mr. Madisetti's report is going
08:49:35
       18
            to be whatever it is, and he, like any other expert witness
08:49:37
        19
08:49:40
       20
            in this case, is going to be confined to the -- the
            boundaries of that expert report.
08:49:46
       21
08:49:47
        22
                    MR. POLLINGER: And, Your Honor, and
08:49:50
       23
           Mr. Summersgill, I suggest you look at Paragraph 169 of his
08:49:56
       24
            report, because I believe it is cited there. It's his
08:49:58 25
            opening report. His opening report.
```

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THE COURT: All right. Is there anything else we
08:50:02
         1
           need to take up before we return Mr. Madisetti --
08:50:04
           Dr. Madisetti, I'm sorry, to the witness stand and continue
08:50:09
           with his direct examination?
08:50:11
                    MR. POLLINGER: Other than having Professor
08:50:13
         5
08:50:16
           Madisetti take the stand, we may want to seal the court
            again before we bring in the jury because the testimony
08:50:20
        7
            will be under seal, Your Honor.
08:50:24
                    THE COURT: All right. Mr. Pollinger, you may go
08:50:26
       10 to the podium and prepare.
08:50:28
                    Let me ask you this, sir: Do you prefer doctor,
08:50:32
       11
08:50:33 12
           do you prefer professor, what do you prefer?
                    THE WITNESS: Either is fine, Your Honor. Doctor
08:50:35
       13
08:50:37 14 is fine.
08:50:38 15
                    THE COURT: If you'd please return to the witness
           stand. And I'll remind you on the record, Dr. Madisetti,
08:50:40
       16
           you remain under oath just as you were yesterday.
08:50:45
       17
08:50:49
       18
                    THE WITNESS: Yes, Your Honor.
08:50:50 19
                    THE COURT: Okay. Let's bring in the jury,
08:50:52 20 please.
                    COURT SECURITY OFFICER: All rise.
08:50:52 21
       22
                    (Jury in.)
08:50:54
08:51:17 23
                    THE COURT: Good morning, ladies and gentlemen of
08:51:18 24 the jury. I hope you had a good evening. Please have a
08:51:21 25
           seat, please.
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When we recessed yesterday, the Plaintiff, through
08:51:22
         1
            counsel, Mr. Pollinger, was engaged in a direct examination
08:51:26
         2
            of Professor Vijay Madisetti. We stopped in the middle of
08:51:32
         3
            that direct examination, and we'll continue there this
08:51:36
08:51:39
            morning.
         5
                     Mr. Pollinger, you may continue with your direct
08:51:40
            examination of the witness.
       7
08:51:43
08:51:44
         8
                     MR. POLLINGER: Thank you, Your Honor.
                     (Transcript sealed.)
08:51:44
         9
08:51:44
       10
                     (This portion of the transcript is sealed
                     and filed under separate cover as
08:51:44
       11
                     Sealed Portion No. 5.)
09:50:47 12
09:50:47
       13
                     (Courtroom unsealed.)
                     THE COURT: Mr. Sheasby, is there a reason you're
09:51:14
       14
           not at your proper place at the bar?
09:51:25
       15
                     MR. SHEASBY: Your Honor --
09:51:27
       16
09:51:29 17
                     THE COURT: Do you need to meet with your IT
       18
09:51:31
           person?
       19
                     MR. SHEASBY: Your Honor, for the assistance of
09:51:31
09:51:33 20
           the cross-examination, I -- I have given up my seat to
09:51:37 21
           Mr. Pollinger.
       22
                     THE COURT: Then please find a seat somewhere
09:51:37
09:51:39 23 else.
09:51:51 24
                    All right. You may proceed, counsel.
                    MR. SUMMERSGILL: Thank you, Your Honor.
09:51:53 25
```

09:51:53 1 CROSS-EXAMINATION BY MR. SUMMERSGILL: 09:51:53 2 Q. Good morning, Professor Madisetti. 09:51:55 A. Good morning, sir. 09:51:56 Q. My name is Michael Summersqill. We've met a few times 09:51:57 09:52:01 before, including at your deposition. Is it okay if I ask 7 | you a few questions today? 09:52:04 09:52:05 8 A. Sure. Q. Now, you're appearing today as an expert witness, 09:52:06 09:52:09 10 correct? A. Yes, as an independent expert witness. 09:52:10 11 Q. And you're charging the Plaintiffs for your time today, 09:52:12 12 09:52:16 13 correct? 09:52:16 14 A. Yes. 09:52:16 15 Q. You're charging the Plaintiffs for your time working on 09:52:19 16 this case, correct? 09:52:20 17 A. Yes. Q. And you're charging the Plaintiffs \$500.00 an hour, 09:52:21 18 09:52:25 19 right? 09:52:25 20 A. Yes. Q. And as of your deposition, I believe, two months ago, 09:52:26 21 09:52:30 22 you had billed between three and 400 hours to this case, 09:52:36 23 | correct? 09:52:36 24 A. I don't remember the exact numbers, but that sounds right. 09:52:39 25

```
1 Q. And since your deposition, you've certainly spent more
09:52:39
          time working on the case, right?
09:52:42
           A. Yes. The last couple of months, yes.
09:52:44
           Q. And including to prepare for your testimony today,
09:52:46
           right?
09:52:50
        5
           A. Yes.
09:52:50
        6
           Q. And so is it fair to say that you've billed the
09:52:51
        7
           Plaintiffs hundreds of thousands of dollars for your work
09:52:54
           on this case?
09:52:57
       9
09:52:58 10
           A. Yes.
           Q. More than $400,000.00?
09:52:59
       11
           A. I -- I don't think so, but something -- again,
09:53:02
      12
09:53:10
      13
           recalculate, probably 600 hours times $500.00.
09:53:22 15
          fair?
           A. Between -- yeah, 300 and 400, maybe less -- a little
09:53:22 16
09:53:24
      17
           less, yes.
           Q. Now, this isn't your first time working as an expert
       18
09:53:24
09:53:29 19
           witness in a patent litigation, right?
09:53:32 20
           A. No, it's not.
09:53:33 21
           Q. And, in fact, you've worked as an expert in patent
      22
           litigation cases over 50 times, right?
09:53:36
09:53:38 23
           A. This is over the last 15, 20 years.
09:53:40 24
           Q. But you've worked as an expert litigation witness over
```

50 times, right?

09:53:44 25

- 1 | A. Yes, over the last 10, 15 years. 09:53:44
- Q. And you've had your deposition taken 75 to 80 times, 09:53:47
- 3 correct? 09:53:52
- 09:53:52 A. Yes. Again, that's -- that's a rough number, yes.
- Q. You've testified at trial roughly 30 times before, 09:53:58 5
- 09:54:02 correct?
- A. Yes. I mean, again, it's a rough number. 09:54:02 7
- Q. And over the course of your career, you've made between 09:54:05 8
- two and \$3 million working as a litigation expert witness, 09:54:09
- correct? 09:54:15 10
- A. Yes. Over the past 10, 15 years, if you multiply the 09:54:15 11
- 09:54:21 12 amount per year over those years.
- 09:54:23 13 Q. And during that time -- over that period of time, at
- 09:54:26 least 30 to 40 percent of your income came from serving as 14
- 09:54:32 a litigation expert witness, correct? 15
- A. Some years, yes. Some years -- some years, less. Some 09:54:33 16
- years, around that. 09:54:42 17
- Q. Now, in this case, you're offering testimony on behalf 18 09:54:43
- 09:54:47 19 of the five Plaintiffs, correct?
- A. Yes. 09:54:49 20
- 09:54:49 21 Q. And that's who retained you in this case, correct?
- 22 A. Yes. 09:54:54
- 09:54:54 23 Q. But at your deposition just two months ago, you told us
- 09:55:02 24 | you couldn't -- you couldn't recall the specifics of who
- retained you, correct? 09:55:05 25

09:55:06 A. I was mentioning PanOptis, but you had asked me about 1 all the Defendants' names. I did not remember the legal 09:55:09 3 | names. 09:55:11 Q. You were unable to identify the five Plaintiffs in this 09:55:12 case, right? 09:55:16 09:55:17 A. By -- by the legal names, yes. I could not identify by the legal names. I mentioned PanOptis. 09:55:24 Q. Well, and what you told us was that you deferred to the 09:55:26 8 Plaintiffs' legal side about who you were providing 09:55:29 testimony for, right? 09:55:32 10 A. Yes. I said I couldn't remember the legal names. 09:55:34 11 Q. Right. So you couldn't remember the -- who the 09:55:41 12 09:55:45 13 Plaintiffs were, and you were deferring to the Plaintiffs' lawyers as to who you were providing testimony for, right? 09:55:47 14 09:55:49 A. Yes. I was saying I was working for PanOptis. 15 Q. Now, you do know who the Defendant is in this case, 09:55:53 16 Apple, correct? 09:55:56 17 09:55:57 18 A. Yes. Q. And Mr. Pollinger didn't ask you questions about your 09:55:59 19 09:56:03 20 work against Apple in the past, did he? A. I'm not against Apple. I provide independent technical 09:56:05 21 09:56:10 22 opinions. 09:56:11 23 Q. Well, is it okay if I ask you a few questions about your prior testimony opposed to Apple? 09:56:14 24

09:56:17 25

A. Sure.

- 09:56:17 1 Q. So this isn't the first time that you've testified on
- 09:56:20 2 the opposite side of a patent litigation from Apple, right?
- 09:56:24 3 A. That's right.
- 09:56:25 4 Q. And you've testified opposite Apple at least nine
- 09:56:30 5 times, fair?
- 09:56:31 6 A. I don't recall the exact number, but a few times.
- 09:56:36 7 Q. Rough -- roughly nine times, Dr. Madisetti?
- 09:56:41 8 | A. I don't recall the exact number, but it could be. Over
- 09:56:43 9 the last 10, 12 years, I can remember three or four
- 09:56:48 10 different matters.
- 09:56:48 11 Q. And you'd agree there's nothing wrong with that, right?
- 09:56:51 12 A. As I said, I'm not against Apple or any party. I just
- 09:56:55 13 do my technical work.
- 09:56:57 14 Q. Well, Dr. Madisetti, you've been paid more than
- 09:57:00 15 \$1 million in cases where you were testifying opposite to
- 09:57:05 16 Apple, right?
- 09:57:06 17 | A. Again, I don't recall the specific numbers, but this is
- 09:57:09 18 over the last 10 years, so I -- I would guess that it would
- 09:57:12 19 be somewhere around there.
- 09:57:13 20 Q. Well, let me -- let me see if I can refresh your
- 09:57:16 21 | recollection. If you could look at Tab 1 in your binder,
- 09:57:21 22 | please. And that's your deposition, sir. And if you could
- 09:57:25 23 look at Page 20, Lines 9 to 14, please.
- 09:57:31 24 A. Page 20?
- 09:57:32 25 | Q. Yes. Lines 9 to 14, Dr. Madisetti.

```
09:57:58
         1
            A. Yes.
            Q. And does that refresh your recollection, sir, that in
09:57:59
            the cases where you've testified on behalf of a party
09:58:03
09:58:05
            opposed to Apple, you've been paid close to a million
            dollars, correct?
09:58:10
         5
            A. Yes, I -- I mentioned that. Again, it's -- it's an
09:58:11
09:58:14
        7
            estimate, yes.
            Q. Now, you're testifying opposed to Apple again in this
09:58:14
         8
            case, right?
09:58:17
       10
            A. As I said, I mean, I -- I -- I would say I was an
09:58:18
            independent expert, but Apple is on the other side.
09:58:22
        11
09:58:27
       12
            Q. Well -- and you'd like the jury to believe that Apple
       13
09:58:30
            infringes the three patents that you just testified about,
09:58:33 14
           right?
09:58:33 15
            A. Yes. I provided the basis of my opinion, as well.
            Q. The '332 patent, the '833 patent, and the '557 patent,
09:58:35
       16
09:58:41
       17
          correct?
       18
            A. Yes.
09:58:41
            Q. Now, Dr. Madisetti, there are multiple inventors listed
09:58:41
       19
09:58:46 20
            on the front page of each of the three patents you
09:58:50 21
           testified about, correct?
       22
            A. Yes.
09:58:51
09:58:52 23
            Q. The '557 patent lists multiple inventors, right?
09:58:56 24
            A. Yes.
            Q. The '332 patent lists multiple inventors, correct?
09:58:57 25
```

```
09:59:04
         1 A. Yes.
            Q. And the '833 patent also lists multiple inventors,
09:59:04
09:59:08
            right?
         3
09:59:08
            A. Yes.
            Q. And in total -- I counted them up -- there are 15 named
09:59:09
09:59:14
            inventors on the three patents that you analyzed, correct?
            A. I will -- I have not counted the exact number, but I
        7
09:59:17
09:59:24
            wouldn't be surprised.
09:59:24
            Q. Does that sound about right?
            A. Yes.
09:59:26
       10
09:59:26
            Q. Now, sir, who would know more about the ideas that the
        11
            inventors came up with, you or the named inventors?
09:59:31
        12
09:59:35
       13
            A. I'm -- I'm not sure as to your question.
            Q. Well, is it fair to expect that the named inventors
09:59:41
       14
09:59:47
       15
           would be the ones who are most knowledgeable about what
           they actually invented?
09:59:50
       16
09:59:51
            A. I disagree. I think the patent is complete.
       17
            provides full details as to what the invention is about.
09:59:56
       18
10:00:00
       19
            Q. Okay. So you know more about the patents and the
10:00:04
       20
            circumstances of their origination than even the inventors
            do; is that your testimony?
10:00:08
       21
10:00:09
       22
            A. That's not my testimony. My -- my testimony is that,
10:00:12
       23
            based on a review of the patents and the file history, I
10:00:15 24
            would know as much as anyone else with respect to the
            patents and what the claims cover --
10:00:18 25
```

- 10:00:20 1 Q. Okay.
- A. -- in light of the Court's construction. 10:00:20
- Q. Now, you told the jury you conducted an extensive 10:00:24 3
- investigation for this case, right? 10:00:27
- A. Yes. I looked at different types of evidence, I looked 10:00:30
- 10:00:34 at deposition testimony, source code, standards, and other
- such evidence. 10:00:39 7
- Q. You told the jury that you spent hundreds of hours 10:00:39
- 10:00:44 performing your analysis for this case, correct?
- 10:00:46 10 A. Yes. About 200 hours per patent, yes.
- 10:00:51 Q. And prior to reaching your conclusions and submitting 11
- your reports in this case, you didn't speak with any of the 10:00:54 12
- named inventors, correct? 10:01:00 13
- A. I did not personally speak to them. I reviewed their 10:01:01 14
- 10:01:05 15 deposition testimony.
- Q. Sir, the deposition you're referring to is from a 10:01:05 16
- 10:01:12 17 different case, correct?
- A. Yes. 10:01:14 18
- Q. You didn't speak to a single inventor on the three 10:01:14 19
- 10:01:17 20 patents in this case, correct?
- A. Yes. I did not need to. I reviewed the patents. 10:01:19 21
- 10:01:22 22 Q. So, in forming your opinions, you never spoke with a
- 10:01:26 23 single named inventor on the '332 patent, right?
- A. I did not. 10:01:30 24
- Q. You didn't speak to a single named inventor on the '833 10:01:30 25

```
10:01:37
        1
           patent?
10:01:37
           A. I did not.
           Q. And you didn't speak to a single named inventor on the
10:01:38
            '557 patent, right?
10:01:42
           A. I did not.
10:01:42
        5
10:01:43
           Q. Now --
        7
                    THE COURT: Dr. Madisetti, pull the microphone
10:01:45
           down just a little bit.
10:01:46
        8
10:01:48
                    THE WITNESS: Sorry -- sorry, Your Honor.
        9
                    THE COURT: Thank you. That helps.
10:01:49 10
10:01:50 11
                    Continue, please.
           Q. (By Mr. Summersgill) So, Dr. Madisetti, you never
10:01:56 12
10:02:00 13
           personally spoke to the inventors about the work they were
           doing that led to any of these patents, right?
10:02:02
       14
           A. I did not. As I said, I did not need to.
10:02:03 15
           Q. And you never asked the inventors how they came up with
10:02:06 16
10:02:08 17 | their ideas that resulted in the patents, correct?
           A. I did not speak to them.
10:02:11
       18
           Q. And you never asked the inventors about the
10:02:13 19
10:02:16 20
           significance of these three patents, right?
10:02:19 21
           A. I did not. I reviewed the papers and patents.
10:02:23 22
           Q. Now, as part of your work on this case, you have spoken
10:02:27 23 | with Optis's lawyers, correct?
10:02:32 24
          A. Yes.
           Q. The gentlemen sitting at this table right here,
10:02:33 25
```

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10:02:37
         1 | correct?
           A. Yes.
10:02:37
         2
           Q. And you spent many hours speaking with Optis's lawyers,
10:02:37
           correct?
10:02:41
           A. Yes.
10:02:41
         5
10:02:43
            Q. So we can both agree that you've spent more time
            speaking to Optis's lawyers than with the inventors of the
10:02:47
10:02:52
           patents in this case?
        8
10:02:53
           A. Yes. But I said, I reviewed the documents at issue,
10:02:57
       10
            including the patents and the proposals and was fully
10:03:00
       11
           informed.
           Q. Right. But you didn't speak to the inventors?
10:03:00 12
10:03:03 13
           A. I agree.
           Q. Now, we can agree that the baseband computer chips that
10:03:03 14
10:03:08
       15
           are in the Apple products allow the devices to communicate
           over cellular networks, right?
10:03:11 16
           A. The baseband chips are part of the equation. You
10:03:14
       17
           require the RF, you require the other stages, as well.
10:03:20
       18
10:03:23 19
            Q. And if you were to pull those baseband chips out of the
10:03:26 20
           products, they wouldn't work, right?
10:03:29 21
           A. Yes.
10:03:29 22
            Q. And if you pulled those baseband chips out of the
10:03:32 23
           products, you wouldn't have an infringement theory,
10:03:36 24
          correct?
           A. The baseband is part of the infringement, so if you
10:03:36 25
```

- 10:03:38 1 pull a part of it out, you wouldn't.
- 10:03:43 2 Q. Now, historically, Apple has purchased its baseband
- 10:03:46 3 chips from Intel and Qualcomm, correct?
- 10:03:49 4 A. Yes, the two suppliers, Intel and Qualcomm.
- 10:03:52 5 Q. And Intel is a company that specializes in making
- 10:03:59 6 computer chips, right?
- 10:04:03 7 A. Yes.
- 10:04:04 8 Q. Qualcomm is a company that specializes in making
- 10:04:07 9 computer chips, right?
- 10:04:08 10 A. Yes, sir.
- 10:04:08 11 Q. And you'd agree that both of those companies have very
- 10:04:17 12 | significant expertise designing computer chips, right?
- 10:04:19 13 A. Again, it's a very general question, but I would
- 10:04:22 14 generally agree.
- 10:04:22 15 Q. Now, to be sure how the functionalities in the Apple
- 10:04:26 16 products work that you've accused of infringement, you need
- 10:04:30 17 to be able to look at those baseband chips in the Apple
- 10:04:35 19 A. You have to look at the baseband and also the other --
- 10:04:39 20 other chips, not just the baseband.
- 10:04:40 21 Q. And you'd need to look at the source code of the
- 10:04:45 22 | baseband chips, correct?
- 10:04:46 23 A. Yes, the source code and the associated product
- 10:04:50 24 descriptions, so I did that.
- 10:04:53 25 Q. All right. Well, let's turn to the specific analysis

```
1 you did in this case, Dr. Madisetti.
10:04:55
                    Please turn to PX-4, which is Tab 19 in your
10:04:58
           binder. This is the '557 patent, correct?
10:05:06
           A. Which volume is it, sir?
10:05:12
           Q. It is Tab 19. I believe it's in the first volume,
10:05:18
10:05:21
           Dr. Madisetti. I'm sorry, it's in the second volume.
           A. Yes.
10:05:26
        7
           Q. My apologies. And just let me know when you have that,
10:05:27
       9 | sir.
10:05:36
10:05:36 10 A. Yes, I'm on Tab 19.
       11 Q. So this is the '557 patent that you analyzed in this
10:05:53
10:05:56 12 case, right?
          A. Yes.
10:05:57
       13
           Q. And the '557 patent relates to the process of sending
10:05:57
       14
10:06:00 15 | messages over a random access channel called the RACH
           channel, right?
10:06:10 16
           A. Yes, sir, at a -- at a high level.
10:06:10 17
           Q. And mobile devices use this random access channel to
10:06:13 18
10:06:18 19
           make an initial connection with a base station, right?
10:06:20 20 A. Yes.
           Q. And the '557 patent, among other things, relates to the
10:06:20 21
           use of something called sequences -- and you referred to
10:06:23 22
10:06:27 23
           them as signatures in your direct testimony -- to make that
10:06:31 24
           initial connection, correct?
10:06:33 25
           A. Yes.
```

```
1 | Q. Now, in your testimony, you discussed Claims 1 and 10
10:06:34
           of the '557 patent, correct?
10:06:38
10:06:39
        3 A. Yes.
10:06:43
                    MR. SUMMERSGILL: And could we please pull up
        5 | Claim 1?
10:06:46
           Q. (By Mr. Summersgill) Now, Claim 1 starts by saying, a
10:06:48
           mobile station apparatus comprising. Do you see that?
10:06:51
10:06:56
           A. I do.
        8
           Q. And then there are a series of limitations that follow
10:06:57
       10 | in the claim, right?
10:06:59
          A. Yes, different parts.
10:07:00
       11
10:07:02 12
           Q. And even you would agree that certain elements of the
10:07:06 13 | claims were known before the '557 patent, right?
10:07:09 14 A. I think we discussed this in my deposition. I said,
10:07:13 15 | not in the claimed manner.
10:07:15 16 Q. Well, Claim 1 requires a mobile station, correct?
10:07:19 17
           A. Yes.
10:07:20 18
           Q. An example of a mobile station is a cell phone,
10:07:26 19 correct?
10:07:26 20 A. Yes. Outside the context of the claim.
10:07:28 21 \mid Q. And cell phones existed before the '557 patent, right?
10:07:33 22 | A. Yes, but not in the manner claimed. That's what we
10:07:36 23 said.
10:07:36 24 Q. Base stations existed before the '557 patent, right?
```

10:07:40 25

A. Yes.

- 10:07:40 1 Q. Before the '557 patent, it was known that mobile phones could initiate access with a base station, correct?

 10:07:50 3 A. Yes. Outside the context of the claims.
- 10:07:54 4 Q. And, for example, the 3G standard, which is the
 10:07:58 5 standard that preceded LTE and the '557 patent, that
 10:08:03 6 included a way for mobile phones to initiate access with
- 10:08:08 7 base stations, right?
- 10:08:10 9 Q. And the 3G standard used sequences to initiate access
- 10:08:16 10 with base stations, correct?

A. Yes, in a different way.

- 10:08:18 11 A. Yes, in a different way.
- 10:08:20 12 Q. And before the '557 patent, the idea of generating
 10:08:26 13 sequences for use in initiating access with a base station
 10:08:30 14 was also known, right?
- 10:08:33 15 A. Yes, but I -- as I said, in a different way.
- 10:08:36 16 Q. Now -- so we can agree that the '557 patent requires 10:08:43 17 performing this RACH procedure in a very specific way,
- 10:08:48 18 right?

10:08:09

8

- 10:08:48 19 A. I would defer to the claims, Claims 1 and Claims 10.
- 10:08:54 20 Q. Well, sir, you don't disagree that the '557 patent
- 10:08:59 21 describes a specific way of how mobile devices perform this
- 10:09:06 22 RACH procedure, do you?
- 10:09:07 23 A. At a very high level, yes, but I will defer to the 10:09:13 24 claims as to the detail.
- 10:09:14 25 Q. Now, it's your opinion that Apple has infringed Claims

- 10:09:18 2 A. Yes. I provided the support in my presentation.
- 10:09:21 3 Q. And to be clear, Apple doesn't have the burden of
- 10:09:26 4 proving that it does not infringe, right?
- 10:09:29 5 A. I don't -- I'm -- I'm not offering a legal opinion.
- 10:09:33 6 All I've done is shown the infringement.
- 10:09:35 7 Q. But you understand, sir, do you not, that the
- 10:09:38 8 | Plaintiffs have the burden of proving infringement,
- 10:09:43 9 correct?
- 10:09:43 10 | A. At a high level, yes.
- 10:09:45 11 | Q. And that means that the Plaintiffs must prove that
- 10:09:48 12 | everything in the asserted claims is found within the Apple
- 10:09:55 13 | products, right?
- 10:09:56 14 A. Yes, that's what I've done.
- 10:09:57 15 Q. And if even one limitation is missing from Apple's
- 10:10:00 16 products, the jury must find no infringement, correct?
- 10:10:07 17 A. Yes.
- 10:10:07 18 | Q. And Apple says that the Qualcomm and Intel baseband
- 10:10:11 19 chips that are in the Apple products don't meet at least
- 10:10:15 20 | this selecting unit limitation -- that's the second
- 10:10:19 21 | limitation on our screen -- right?
- 10:10:21 22 A. Yes. You are to be a little more specific, but -- but
- 10:10:29 23 at a high level, yes.
- 10:10:31 24 | Q. Now, I'm not going to read all of them because it will
- 10:10:38 25 | take too long, but my count, the selecting unit limitation

1 contains about 93 words. Is that about right? 10:10:42 10:10:47 A. Again, I -- I will take your representation on that. Q. Well, we can agree that the Plaintiffs have to show 10:10:50 that everything in that limitation is found within the 10:10:53 Apple products, right? 10:10:57 10:10:57 A. Yes, I've shown that. Q. Now, the selecting unit requirement of Claim 1 10:10:59 7 requires, among other things, that a mobile device, quote, 10:11:05 randomly select a sequence from a plurality of sequences 10:11:10 contained in one group of a plurality of groups into which 10:11:17 10 a pre-determined number of sequences that are generated 10:11:22 11 from a plurality of base sequences. Do you see that? 10:11:26 12 A. That's a portion of the limitation. So the entire 13 10:11:30 limitation must be present. 10:11:33 14 Q. Right. And -- but I -- did I read that portion of the 10:11:34 15 limitation correctly, Dr. Madisetti? 10:11:38 16 A. Yes. 10:11:40 17 Q. And so the claim includes the language, quote, 18 10:11:41 10:11:45 19 sequences that are generated, correct? 10:11:50 20 A. It includes the entire limitation. So it doesn't require that the sequences are generated. 10:11:54 21 10:11:57 22 Q. Sir, the claim includes the languages sequences --10:12:02 23 sequences that are generated, right? 10:12:04 24 A. I disagree. I would say that the phrase includes more

10:12:07 25

than that.

- Q. Okay. But we can both agree, sir, that the words, 10:12:09 1 sequences that are generated from a plurality of base 10:12:14 sequences, are in the claim, right? 10:12:18 A. The English words are present, but the claim does not 10:12:19 require that the sequences have to be pregenerated. 10:12:24 10:12:30 Q. Okay. So it's your testimony, sir, that the claim says that sequences that are generated from a plurality of base 10:12:33 7 sequences is in the claims, but that limitation isn't 10:12:38 required? Is that your testimony? 10:12:41 A. No, sir, that's not. 10:12:43 10 10:12:44 Q. Okay. So we can agree that the claim requires, quote, 11 10:12:49 12 sequences that are generated from a plurality of base 10:12:55 13 sequences, right? A. Again, as I said, I disagree. The entire claim 10:12:56 14 10:13:00 15 limitation has to be met. All I said was the English language, sequences that are generated, is present in the 10:13:03 16 limitation. 10:13:07 17 Q. Okay. So the English language that I just read is in 10:13:07 18 the claim, right? 10:13:11 19
- 10:13:11 20 A. Yes, it is.
- 10:13:12 21 Q. And Claim 10 also includes that same English language,
- 10:13:15 22 correct?
- 10:13:15 23 A. Yes.
- 10:13:16 24 Q. Now, for your infringement analysis, you concluded that
- 10:13:22 25 | that generation -- that the generation functionality in

```
Apple's baseband chips was irrelevant, didn't you?
10:13:25
         1
10:13:28
           A. I said that the embodiments covered both generation and
           generation from sequences.
10:13:35
         3
                    MR. SUMMERSGILL: Your Honor, move to strike as
10:13:40
10:13:42
        5
           non-responsive.
10:13:53
                    THE COURT: I'll sustain the objection.
        7
            Q. (By Mr. Summersgill) Dr. Madisetti --
10:13:58
                    THE COURT: The question was, Dr. Madisetti, did
10:13:59
         8
10:14:01
           you find that the baseband chips were irrelevant. And your
            response did not address that question. So I'm going to
10:14:09
       10
10:14:13
       11
            sustain the objection.
       12
                    Either ask the question again or move on,
10:14:14
       13
10:14:17
           Mr. Summersgill.
                    MR. SUMMERSGILL: Thank you, Your Honor.
10:14:18
       14
10:14:19
       15
           Q. (By Mr. Summersgill) Dr. Madisetti, for your
            infringement analysis, you concluded that the generation
10:14:22
       16
       17
            functionality in Apple's baseband chips was irrelevant,
10:14:26
       18
           correct?
10:14:30
10:14:30 19
           A. I disagree.
       20
10:14:31
           Q. Well, you know who Nigel Jones is, correct?
           A. Yes. He did some of the source code review.
       21
10:14:41
10:14:44
       22 Q. He's one of the Plaintiffs' experts in this case,
10:14:46 23 right?
10:14:46 24 A. Yes.
10:14:47 25
           Q. And he submitted a source code expert report in this
```

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10:14:51
         1 case?
10:14:54
            A. Yes.
         2
            Q. Source code is one of the pieces of evidence that would
10:14:54
         3
            tell you how the baseband chips in the Apple products work,
10:14:58
            right?
10:15:04
         5
            A. Yes.
10:15:04
            Q. It's a set of instructions -- source code is a set of
        7
10:15:04
            instructions that tells the baseband chip what to do,
10:15:07
10:15:12
            right?
        9
10:15:12
       10
            A. Yes.
            Q. And you asked Mr. Jones to analyze portions of the
10:15:13
       11
            source code in the Apple products, right?
10:15:18
       12
10:15:20
       13
            A. I also analyzed it myself.
                    MR. SUMMERSGILL: Move to strike as
10:15:23
       14
10:15:25
       15
           non-responsive.
       16
                    THE COURT: I'll sustain that.
10:15:28
                    Dr. Madisetti, the question was: You asked
10:15:37
       17
           Mr. Jones to analyze the portion.
10:15:40
       18
                    Your answer was: I also analyzed it myself.
10:15:42
       19
10:15:45 20
                     I assume that means, yes, you asked Mr. Jones, but
10:15:49 21
            then you went further than that. You need to limit your
10:15:52
       22
            question -- your answers, rather, to the questions that are
10:15:56 23
            asked.
10:15:56 24
                    THE WITNESS: Yes, Your Honor.
                    THE COURT: Mr. Pollinger will get a chance to
10:15:57 25
```

```
follow up with additional questions on redirect.
10:15:59
         1
10:16:01
                    THE WITNESS: Yes, Your Honor.
         2
                    THE COURT: Let's proceed.
10:16:01
         3
10:16:05
            Q.
               (By Mr. Summersgill) Dr. Madisetti, you asked
           Mr. Jones to analyze portions of the source code in the
10:16:09
10:16:11
           Apple products, correct?
        7
           A. Yes.
10:16:12
           Q. And you relied on the source code analysis that
10:16:12
        8
10:16:18
           Dr. Jones -- that Mr. Jones performed, correct?
10:16:21
       10
           A. Yes.
10:16:21
           Q. And, in fact, you asked him to analyze the code, quote,
        11
           under your direction, correct?
10:16:25 12
10:16:26 13
           A. Yes.
           Q. Now -- and you told Mr. Jones when you asked him to
10:16:26 14
10:16:31
       15
           perform that analysis, that it wasn't necessary for him to
           describe the code that performs sequence generation in the
10:16:37
       16
           Apple products, right?
10:16:42 17
           A. I'm not clear as to your question.
10:16:44
       18
            Q. Well, you told Mr. Jones, didn't you, that it wasn't
10:16:55
       19
10:17:01 20
           necessary for him to describe the source code that performs
10:17:08 21
           sequence generation in the Intel and baseband chips,
10:17:17 22
           correct?
10:17:17 23 A. I don't recall. I mean, I said -- I asked him for a
10:17:21 24
            detailed analysis, so I did not exclude anything.
           Q. Well, are you aware that Dr. Jones testified that you
10:17:24 25
```

```
told him it wasn't necessary to describe the code that
10:17:29
         1
           provides the sequence generation in the Apple products?
10:17:34
                    MR. POLLINGER: Your Honor, I object to these
10:17:37
         3
            references to other depositions that Professor Madisetti
10:17:39
        4
            hasn't had the opportunity to review. He needs to
10:17:43
        5
10:17:47
            establish a foundation first.
                    THE COURT: Do you have a response,
        7
10:17:48
            Mr. Summersgill?
10:17:53
                    MR. SUMMERSGILL: Yes, Your Honor. He relied on
10:17:54
            Dr. Jones's report explicitly in his report. He adopted it
10:17:57
        10
10:18:01
        11
            into his report. And he's certainly had an opportunity to
            review the deposition. The deposition was taken weeks, if
10:18:06
       12
            not a month ago, and he's been preparing for trial. He had
10:18:10
       13
            plenty of opportunity to review it.
10:18:13
       14
       15
10:18:15
                    THE COURT: Well, I have no problem with his
            report having adopted the input, but what Dr. Jones may
10:18:20
       16
            have said in other places, I don't think you've laid a
10:18:26
       17
            foundation for that.
10:18:29
       18
                     I'll sustain as to that objection.
10:18:30
       19
10:18:33
       20
            Q. (By Mr. Summersgill) Now, Dr. Madisetti, you're --
            again, you relied on Dr. -- on Mr. Jones's report, correct?
10:18:35
       21
10:18:38
       22
            A. Yes.
10:18:38
       23
            Q. And you know that Mr. Jones did this analysis of the
10:18:44
       24
           source code, correct?
10:18:44 25
           A. Yes.
```

```
Q. He did it under your direction, correct?
10:18:46
         1
10:18:48
           Α.
               Yes.
         2
           Q. You know he was deposed in this case, right?
10:18:50
         3
10:18:53
           A. Yes.
10:18:54
         5
           Q. And you certainly had access to his deposition,
10:18:59
           correct?
           A. Yes.
10:18:59
        7
           Q. Did you read his deposition?
10:19:00
         8
           A. I -- I skimmed through it. I did not read it in
10:19:02
           detail.
10:19:08
       10
10:19:08
            Q. Okay. Well, then let me ask you again, based on your
       11
            skim through it, are you aware that Dr. Jones testified
10:19:12
       12
10:19:15
       13
           that you told him, quote, it wasn't necessary to --
                    MR. POLLINGER: Objection, Your Honor.
10:19:19
       14
10:19:21
       15
           Q. (By Mr. Summersgill) -- to describe the code that
           provides --
10:19:22 16
                    THE COURT: Let him finish the question.
10:19:23
       17
                    MR. POLLINGER: He's publishing -- I'm sorry.
10:19:24
       18
10:19:27 19
                    THE COURT: Finish the question, and then I'll
10:19:29 20
           hear the objection.
10:19:30
       21
            Q. (By Mr. Summersgill) Dr. Madisetti, based on your skim
10:19:33
       22
            of Mr. Jones's deposition, are you aware that he testified
10:19:36 23
           that you told him it wasn't necessary to describe the code
10:19:41
       24
           that provides sequence generation?
                   MR. POLLINGER: Your Honor, I object to this
10:19:45 25
```

question because Mr. Summersgill is publishing the 10:19:46 1 10:19:49 deposition through his oration prior to giving Professor Madisetti a chance to review it. 10:19:53 3 THE COURT: I'll sustain that. 10:19:55 4 Q. (By Mr. Summersgill) Okay. Dr. Madisetti, why don't 10:19:57 5 10:20:11 you turn to Tab 17, which is the Jones's deposition, Page 136, Lines 15 to 20? And let me know after you've had 10:20:17 7 a chance to review it. 10:20:19 8 10:20:19 A. Which page, sir? Q. Page 136, Lines 15 to 20. And just let me know when 10:20:20 10 10:20:28 you've had a chance to review that, sir. 11 10:21:16 12 A. Yes, I've reviewed that portion. 10:21:17 13 Q. And does that refresh your recollection that you told Dr. Jones that it wasn't necessary for him to describe the 10:21:21 14 10:21:25 15 source code that provides the sequence generation functionality in the Intel and Qualcomm chips? 10:21:28 16 A. As I said, I don't recall this. I don't review -- I 10:21:33 17 10:21:37 18 don't recall reviewing this section, and I won't agree with 10:21:40 19 that. 10:21:40 20 Q. Well, does reviewing it now refresh your recollection 21 as to whether you told Dr. Jones that he didn't need to 10:21:43 10:21:49 22 describe that portion of the source code? 10:21:50 23 A. Again, I don't recall this discussion with Dr. -- with Mr. Jones. 10:21:54 24

Q. Well, isn't it true, sir, that because of what you told

10:21:54 25

Mr. Jones, he didn't analyze the hardware code in Apple --10:22:00 1 10:22:06 Apple's products that perform the actual sequence generation, right? 10:22:10 3 A. I disagree. 10:22:11 Q. Sir, did you read the portion of Mr. Jones's deposition 10:22:13 5 10:22:19 where he talks about what he included in his report? A. Yes, I did. And even after reading it, I wouldn't 10:22:22 7 agree with that, because he's talking about the claims. 10:22:25 10:22:29 Q. Well, sir, does reading that deposition now refresh your recollection that his report that you relied on 10:22:33 10 doesn't describe the code that performs the actual sequence 10:22:39 11 generation in the Apple products? 10:22:44 12 10:22:45 A. I disagree that the -- I disagree with that statement. 13 Q. So you disagree with Mr. Jones? 10:22:50 14 10:22:53 15 A. No. I disagree with your question. I did review the code that does the sequence generation. It is described in 10:22:57 16 10:23:01 my report and Mr. Jones's report. 17 Q. Well, Mr. Jones said that his report does not include 10:23:04 18 10:23:09 19 the code that performs the actual sequence generation, 20 10:23:14 right? 10:23:14 21 A. Again, I would disagree with that statement. I've seen 10:23:17 22 that code, as well as the statement to his report. I can 10:23:20 23 show that to you in his report. 10:23:22 24 Q. So you disagree with Mr. Jones?

10:23:24 25

Α.

No.

```
MR. SUMMERSGILL: Well, Your Honor, I'd ask that I
10:23:30
         1
10:23:32
            now have permission to publish that testimony, because he's
         2
            directly contradicting something that he relied on in his
10:23:36
         3
10:23:38
            report.
                    MR. POLLINGER: Objection, Your Honor. I -- I
10:23:39
         5
10:23:40
            object to the -- to the characterization. This question
            has now been asked multiple times. I object on the basis
        7
10:23:45
            of asked and answered.
10:23:48
        8
10:23:51
                    THE COURT: Well, Mr. Summersgill, I don't know
            how you can impeach this witness with the testimony of
10:23:53
        10
            another person. That's what it sounds like you're --
10:23:56
        11
            you're asking me to let you do.
10:23:59
        12
10:24:00
        13
                    MR. SUMMERSGILL: Well, Your Honor, I'm asking you
            to let me impeach him with the testimony of a source code
10:24:02
        14
10:24:06
        15
            expert whose report he adopted and whose deposition he's
            reviewed and now he's disagreeing with.
10:24:11
        16
10:24:17
        17
                    THE COURT: I don't know how you can impeach a
       18
            witness with anything other than their own prior
10:24:19
            inconsistent statements.
10:24:22
        19
10:24:22
       20
                    I'm going to overrule that request.
10:24:25 21
                    MR. SUMMERSGILL: Thank you, Your Honor.
10:24:26
       22
                    THE COURT: Let's move on.
10:24:27
        23
            Q. (By Mr. Summersgill) Now --
10:24:28
       24
                    THE COURT: As a matter of fact, let's not move
            on. Let's use this as a good place to take a recess,
10:24:30 25
```

```
10:24:34
         1
            ladies and gentlemen.
                     I'll ask the members of the jury simply to close
10:24:34
         2
            their notebooks and leave them in their chairs, follow all
10:24:37
         3
10:24:41
            the instructions I've given you, including as you would
            expect me to remind you, not to discuss the case against
10:24:46
            each other -- excuse me, among each other. And we'll have
10:24:48
        7
            you back in here shortly to continue.
10:24:54
10:24:57
         8
                     The jury is excused for recess at this time.
                     COURT SECURITY OFFICER: All rise.
10:24:59
         9
10:25:00
       10
                     (Jury out.)
        11
                     THE COURT: The Court stands in recess.
10:25:01
10:41:00
       12
                     (Recess.)
10:41:05
       13
                     COURT SECURITY OFFICER: All rise.
10:41:06
       14
                     THE COURT: Be seated, please.
10:42:46
       15
                     Counsel, let me ask before I bring the jury in, I
            know we have some remaining witnesses by deposition. Will
10:42:56
       16
            you be in a position at the time they are called to give us
10:42:59
       17
            the allocations of time between Plaintiff and Defendant so
       18
10:43:03
10:43:06
       19
            we can keep that straight?
       20
10:43:07
                     MR. SHEASBY: Yes, we will, Your Honor.
10:43:09
       21
                     THE COURT: Okay.
       22
                     MR. SHEASBY: Your Honor, may I address one issue
10:43:10
10:43:12
       23
            before you call in the jury briefly?
10:43:14
       24
                    THE COURT: You're on the clock, go ahead.
10:43:15 25
                    MR. SHEASBY: It relates to the cross-examination
```

10:43:17 1 issue. 10:43:17 Apple's attorneys talked about Mr. Madisetti's 2 last 15 -- 15 years of being an expert witness and talked 10:43:22 3 about the income he's received over the last 15 years, 10:43:26 which was beyond what the Court had authorized. Part of 10:43:29 10:43:34 Dr. Madisetti's income has been from being retained as an expert by the Wilmer firm and the lawyers who represent 7 10:43:38 10:43:41 Apple. 8 10:43:42 THE COURT: Let me ask you a question, Mr. Sheasby. Why are you arguing this to me? He's not 10:43:43 10 10:43:47 11 your witness. 12 MR. POLLINGER: Thank you, Your Honor. I'll just 10:43:48 continue on from there. 10:43:49 13 But given the questioning on his income that he's 10:43:51 14 10:43:53 15 received over the years and all the cases he's had, I would submit that they've opened the door for me to ask on 10:43:57 16 redirect, Professor Madisetti, whether he has ever been 17 10:44:00 hired by the Wilmer Hale law firm and received income 10:44:05 18 through that hiring by the Wilmer Hale law firm. They've 10:44:08 19 10:44:10 20 clearly tried to create a negative impression of his work 21 over the years in all of his cases. In fact, they have 10:44:16 10:44:19 22 hired him --10:44:21 23 THE COURT: As long as it's generic like that and 10:44:24 24 not how much money did they pay you and all kinds of 10:44:26 25 detail. As long as it's the high level, have -- have the

```
Defendant's law firm in this case ever hired you?
10:44:30
         1
10:44:34
                    MR. POLLINGER: Yes.
         2
                    THE COURT: I think -- I think the door has been
10:44:34
         3
10:44:36
            opened to that extent, but not more.
         4
10:44:38
         5
                    MR. POLLINGER: Thank you, Your Honor.
                    THE COURT: All right. Are you ready
10:44:39
         6
        7
            to continue, Mr. Summersgill?
10:44:40
                    MR. SUMMERSGILL: Yes, Your Honor.
10:44:43
         8
10:44:44
                    THE COURT: Let's bring in the jury, please.
         9
                    COURT SECURITY OFFICER: All rise.
10:44:46
       10
10:44:49
       11
                    (Jury in.)
                    THE COURT: Please be seated.
10:45:11
       12
                    We'll continue with the cross-examination of the
10:45:13
       13
10:45:21
       14
           witness by the Defendant.
10:45:21
       15
                    Mr. Summersgill, you may proceed.
                    MR. SUMMERSGILL: Thank you, Your Honor.
10:45:24
       16
               (By Mr. Summersgill) Now, Dr. Madisetti, we were
10:45:25
       17
            Q.
            discussing the fact that the claims require that
       18
10:45:30
10:45:33
       19
            sequences -- that sequences are generated from a plurality
10:45:38
       20
            of base sequences, right?
10:45:42
       21
           A. As I said, I mean, the claim speaks for itself. I
10:45:46
       22
           would not summarize the claim in any other way.
10:45:49
       23
           Q. Now, we can agree that sequence generation is a
10:45:53 24
           multi-step process, correct?
10:45:54 25
           A. I didn't understand the question.
```

```
Q. We can agree that sequence generation -- the process of
10:46:01
         1
            generating a sequence in the Apple products is a multi-step
10:46:04
            process, correct?
10:46:08
            A. Again, I'm not sure. Are you referring to a portion of
10:46:12
            my report?
10:46:16
         5
10:46:17
            Q. I'm just asking you the question, Dr. Madisetti. You
            know, sir, do you not, that the process of sequence
10:46:21
        7
            generation in the Apple products takes multiple steps,
10:46:24
         8
10:46:31
            right?
            A. I would disagree. I think that there is a -- once you
10:46:31
        10
10:46:35
        11
            select the base sequences and the --
       12
                    THE COURT: Dr. Madisetti, you disagree.
10:46:38
10:46:39
       13
                    THE WITNESS: I disagree.
                    THE COURT: That answers the question. You don't
10:46:40
       14
10:46:42
       15
            need to explain the basis of your disagreement unless he
            asks you for it.
10:46:45
       16
10:46:46
                    THE WITNESS: Thank you, Your Honor.
       17
                    THE COURT: Let's continue.
10:46:47
       18
            Q. (By Mr. Summersgill) All right. Well, Dr. Madisetti,
10:46:48
       19
10:46:49
       20
            please take a look at your deposition, Tab 1, Page 170,
            Lines 2 to 11, and let me know when you've had a chance to
10:46:54
       21
10:47:00
       22
            read that.
10:47:03 23
            A. So which exhibit -- which --
           Q. This is Tab 1 --
10:47:05 24
10:47:08 25
           A. Okay.
```

```
Q. -- which is your deposition -- your June 3rd
10:47:09
         1
           deposition, Page 170, Lines 2 to 11, and let me know when
10:47:13
           you've had a chance to read that.
10:47:19
10:47:33
           A. Sorry, once again, which page?
               Page 170 --
10:47:34
         5
            Q.
10:47:37
           Α.
               170.
        7
           Q. -- Lines 2 to 11. Do you see that, sir?
10:47:37
10:47:47
           A. Yes, I'll agree with that portion.
        8
10:48:23
           Q. And you were asked the question that you just read, and
           you -- and you gave that answer, right?
10:48:26
        10
           A. At a high level, yes. But it's not the same language,
10:48:28
        11
10:48:47
       12
           but at a high level, yes.
                    MR. SUMMERSGILL: And I'll ask if we can pull up
10:48:49
       13
          Dr. Madisetti's deposition, Page 170:2 to 11, please.
10:48:52
       14
10:48:56
       15
           Q. (By Mr. Summersgill) You were asked -- this was your
           deposition, Dr. Madisetti, correct?
10:48:58
       16
           A. Yes.
10:48:59
       17
           Q. The deposition was taken roughly two months ago,
10:49:03
       18
           correct?
10:49:07
       19
10:49:07 20
           A. Yes.
10:49:08
       21
           Q.
               On June 3rd of this year, correct?
10:49:11
        22 A.
               Yes.
10:49:12
       23
           Q. You were under oath, correct?
10:49:14 24
           A. Yes.
10:49:14 25
           Q. Same oath you took today?
```

10:49:16 1 A. Yes. And you told the truth at your deposition, right? 10:49:17 Q. 10:49:19 3 A. Yes. 10:49:21 Q. And you were asked: Question: Dr. Madisetti, that wasn't my question. 10:49:23 5 10:49:26 Have you cited in your expert report the hardware 6 7 code that shows how sequences are generated in the Apple 10:49:29 products? Yes or no? 10:49:33 8 10:49:34 Answer: I don't believe that -- that question has 10:49:40 10 a yes or no answer. Sequence generation is a multi-step 10:49:45 process, and I have cited most of the steps. To the extent 11 that Mr. Lanning argues that certain portions are not 10:49:48 12 cited, I reviewed that code, and I believe that they're not 10:49:52 13 relevant to the infringement analysis. 10:49:55 14 10:49:56 15 You were asked that question, and you gave that answer, correct? 10:50:01 16 A. Yes. 10:50:02 17 10:50:02 18 Q. So we can agree sequence generation is a multi-step 10:50:07 19 process, correct? 10:50:08 20 A. Yes, in that context. 10:50:10 21 Q. And your report only cited to source code for some --10:50:15 22 MR. SUMMERSGILL: Can we keep that up, please? 10:50:19 23 Q. (By Mr. Summersgill) -- for some but not all of those 10:50:21 24 steps, correct? A. Yes. And I've reviewed the remaining code, yes. 10:50:22 25

Q. Now, Dr. Madisetti, you're aware, are you not, that 10:50:25 1 Defendant's Exhibits DTX-1931 and 1947 are the hardware 10:50:32 source code for sequence generation in the Intel and 10:50:42 3 Qualcomm chips, right? 10:50:45 A. I would have to look at those. 10:50:46 5 Q. Okay. Well, you didn't show the jury either of those 10:50:49 two exhibits in your two-hour-long direct, correct? 10:50:53 10:50:58 A. Well, I don't -- yes, you may be right, but I don't 8 recall what that code was. 10:51:04 MR. SUMMERSGILL: Now, if we could put Claim 1 10:51:14 10 back up, please. 10:51:17 11 Q. (By Mr. Summersgill) So Claim 1 of the '557 patent 10:51:19 12 10:51:24 13 requires a phone to select a sequence from a plurality of 10:51:30 14 sequences, correct? 10:51:30 A. Again, I disagree. It requires the whole limitation. 15 Q. Right. It requires the whole limitation, but part of 10:51:35 16 that limitation is to select a sequence from a plurality of 10:51:39 17 18 sequences, correct? 10:51:44 10:51:45 19 A. Again, as a part of the entire limitation. So I would 10:51:49 20 disagree if you said it was just that portion. Q. Well, I'm not saying it's just that portion, 10:51:52 21 22 Dr. Madisetti. You understand that, right? 10:51:55 10:51:57 23 A. Well, then I would agree with you that the selecting 10:52:00 24 unit is to be configured as claimed.

Q. And part of the claim is that it has to select a

10:52:04 25

sequence from a plurality of sequences, correct? 10:52:08 1 A. Yes, a part of it. 10:52:11 Q. Now, you told the jury that this requirement to select 10:52:12 3 a sequence from a plurality of sequences is met in the 10:52:19 Apple products by selecting something that you referred to 10:52:22 10:52:25 as a sequence index, correct? 7 A. Yes. 10:52:29 Q. Now, the claims require selecting a sequence, not just 10:52:29 8 a sequence index, right? 10:52:38 10:52:40 10 A. I disagree. Well -- I apologize. Finish your answer. 10:52:41 11 Q. 10:52:44 12 A. I disagree. 10:52:45 Q. The word that the claims use is "sequence," correct? 13 14 A. Yes. I -- I said that, as described in the 10:52:49 embodiments, selecting a sequence is the same as selecting 10:52:55 15 a sequence index in the claims. 10:53:00 16 MR. SUMMERSGILL: Your Honor, move to strike as 10:53:02 17 10:53:04 18 | non-responsive. THE COURT: Sustained. 10:53:05 19 10:53:06 20 Q. (By Mr. Summersgill) Dr. Madisetti, the word used in 10:53:08 21 the claim is "sequence," correct? 10:53:12 22 A. Yes. 10:53:12 23 Q. And in your own expert report, when you wanted to 10:53:16 24 describe a sequence, you called it a sequence, correct?

A. Could you be more specific?

10:53:20 25

1 | Q. Yeah. When you wanted to describe a sequence index in 10:53:28 your expert report, you called it a sequence index, right? 10:53:32 A. Yes. 10:53:37 3 Q. And when you wanted to describe a sequence in your 10:53:38 expert report, you called it a sequence, right? 10:53:41 10:53:45 A. Yes. 7 Q. And even you have stated that a sequence index just 10:53:45 10:53:53 represents a sequence; it's not the sequence itself, correct? 10:53:56 9 A. Again, you have to be more specific. 10:53:56 10 Q. Well, you have taken the position, have you not, in 10:54:04 11 10:54:11 12 this litigation that a sequence index just represents the actual sequence but isn't the sequence itself, correct? 10:54:16 13 A. You have to point to some specific portion of my 10:54:19 14 10:54:25 15 testimony. Q. All right. 10:54:27 16 17 MR. SUMMERSGILL: Well, could we pull up 10:54:31 Dr. Madisetti's report -- opening report, Paragraph 235? 10:54:33 18 Q. (By Mr. Summersgill) The first sentence of that -- do 10:54:39 19 10:54:41 20 you see that, Dr. Madisetti? A. Yes, I do. 10:54:42 21 10:54:45 22 Q. And in the first sentence, you state: For example, 10:54:50 23 Apple's Qualcomm products randomly select a sequence index 10:54:54 24 that represents a sequence from a plurality of available

sequence indexes.

10:54:59 25

```
10:55:00
         1
                    Did I read that correctly?
            A. Yes.
10:55:02
         2
            Q. And so even you, in your expert report in this case,
10:55:02
         3
            distinguished between sequences and sequence indexes,
10:55:07
            correct?
10:55:10
10:55:10
            A. I did not. I was saying that the sequence index is --
            selecting a sequence index is the same as selecting the
10:55:14
10:55:18
            sequence.
        8
            Q. Well, LTE sequences have a certain length, right?
10:55:18
10:55:24
        10
            A. Yes.
10:55:25
            Q. LTE sequences are either 139 or 839 complex values
        11
            long, correct?
10:55:35
       12
10:55:35
       13
           A. Yes.
            Q. But a sequence index is only a single value, right?
10:55:35
       14
10:55:41
       15
            A. A sequence index is an index that takes a value.
            Q. It's only a single value, right?
10:55:49
        16
            A. I would disagree with that. A sequence index takes a
10:55:54
       17
           value.
10:55:57
       18
            Q. Well, Dr. Madisetti, you can't say whether a sequence
10:55:57
       19
10:56:09
       20
            index is the same thing as a sequence, correct?
10:56:12
       21
            A. Could you please repeat the question?
10:56:17
       22
            Q. Yes. You can't say whether a sequence index is the
10:56:23
       23
            same thing as a sequence itself, correct?
10:56:25
       24
            A. I don't think I expressed an opinion on that issue. I
            said that selecting a sequence index is the same thing as a
10:56:41 25
```

```
10:56:49
         1
           sequence.
            Q. Right. So let me get this right. You offered the
10:56:49
            opinion that Apple selects a sequence index, correct?
10:56:51
           A. No, I offered an opinion that Apple selects a sequence
10:56:55
           by selecting the sequence index.
10:56:58
10:57:01
            Q. Right. But you can't say whether a sequence index is
            the same thing as a sequence itself, right?
10:57:03
        7
           A. I did not offer an opinion on that separate issue.
10:57:06
        8
10:57:09
            Q. And we can agree that when the inventors went to get
           their patent --
10:57:12
        10
10:57:13
       11
                   MR. SUMMERSGILL: And if we could put Claim 1 back
10:57:17 12
           up.
10:57:17
       13
            Q. (By Mr. Summersgill) -- the word they used was
           "sequence," correct?
10:57:19
       14
10:57:19
       15
           A. Yes.
           Q. Now --
10:57:20
       16
           A. As I said, I can explain that.
10:57:23
       17
           Q. Now, Dr. Madisetti, the '557 patent isn't the only way
10:57:25
       18
10:57:29
       19
           to use sequences for initiating access, correct?
10:57:33
       20
           A. Could you please be more specific?
       21
           Q. The '557 patent isn't the only way for a cell phone to
10:57:35
10:57:40
       22
           initiate -- to use sequences and initiate access with a
10:57:44
       23
           base station, right?
10:57:49 24
           A. By -- again, I'm not sure as to your question.
```

it -- what do you mean by only way?

10:57:52 25

10:57:55 1 Q. Fair enough. As part of your analysis, you analyzed potential 10:57:56 alternatives to the '557 patent, right? 10:58:00 A. Yes. 10:58:02 Q. And we can agree the '557 patent requires arranging 10:58:03 5 10:58:10 sequences in a particular way, correct? A. Yes. The claims describe the ways. 10:58:14 7 10:58:18 Q. The claims -- and we can see it in Claim 1 -- require 8 sequences generated from the base -- from the same base 10:58:23 sequence and having different cyclic shifts arranged in an 10:58:26 10 increasing order of the cyclic shift, correct? 10:58:31 11 A. Yes, that's a portion of the limitation. 10:58:34 12 10:58:37 13 Q. Now, Apple proposed that one alternative to the '557 way of doing things would be to arrange sequences in a 10:58:42 14 decreasing order of cyclic shift, correct? 10:58:45 15 A. I believe so. 10:58:51 16 Q. And we can agree that decreasing is the opposite of 10:58:52 17 increasing, correct? 10:58:55 18 A. No, because in the context of this limitation, it is 10:58:59 19 10:59:07 20 not, as I can explain. Q. Well, if Georgia Tech told you that they were 10:59:10 21 10:59:13 22 decreasing your salary, you'd know the difference between 10:59:17 23 that and increasing your salary, right? 10:59:21 24 A. As I said, that's a different example.

But what happens in this case is that it's a

10:59:23 25

```
cycle -- it's a cyclic shift, so when you move something in
10:59:26
         1
            a circle, when you decrease it in one way, it increases in
10:59:29
            the other way.
10:59:33
         3
10:59:35
                    MR. SUMMERSGILL: Your Honor, move to strike as
10:59:36
        5
           non-responsive.
10:59:37
                    THE COURT: Sustained.
            Q. (By Mr. Summersgill) Dr. Madisetti, in this case,
10:59:39
            you've taken the position that Apple's decreasing order
10:59:42
            alternative would still infringe the increasing limitation
10:59:47
            of the '557 claims, correct?
10:59:52
       10
            A. I did not. I think I said I did not take an opinion on
10:59:55
       11
11:00:03
       12
           that issue because it was not clear as to what Apple was
       13
11:00:05
            proposing.
11:00:06
       14
            Q. Well, can we see what you said in your expert report,
           Dr. Madisetti?
11:00:09 15
           A. Sure.
11:00:10 16
       17
                    MR. SUMMERSGILL: Let's pull up Dr. Madisetti's
11:00:11
            opening report, Paragraph 506 --
11:00:14
       18
11:00:16
       19
                    THE COURT: Yes, Mr. Pollinger?
11:00:18 20
                    MR. POLLINGER: Your Honor, I object to showing
11:00:20 21
            this -- publishing this to the jury before establishing a
11:00:24
       22
            foundation whether there's a need to show it to the jury
11:00:27 23
            and a basis to show it to the jury.
11:00:29 24
                    THE COURT: This is his expert report. It's a
            prior -- we'll find out, but I assume it's going to be a
11:00:30 25
```

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prior inconsistent statement.
11:00:36
        1
11:00:37
                    MR. POLLINGER: Thank you, Your Honor.
         2
11:00:38
                    THE COURT: I don't see that there's a lack of
        3
           foundation here. That's overruled.
11:00:40
        4
           Q. (By Mr. Summersgill) And in the second sentence in
11:00:42
        5
11:00:44
           that paragraph, Dr. Madisetti, you stated: First, with
           respect to Apple's decreasing order example, my opinion is
11:00:48
           that this alternative is infringing. Do you see that?
11:00:55
11:01:01
           A. Yes. So that means what I said earlier, that
           increasing and decreasing are the same thing.
11:01:06
       10
           Q. So your expert opinion is that increasing -- increasing
11:01:08
       11
11:01:11
       12
           and decreasing mean the same thing, correct?
11:01:12
       13
           A. In the context of what was disclosed by Apple.
11:01:16 14 \mid Q. Now, could we now turn to the '332 patent,
11:01:22 16 A. Sure.
           Q. Now, this is the patent that you discussed with the
11:01:23
       17
           jury that has an equation in the claims, correct?
11:01:25
       18
11:01:28 19
           A. Among other things.
11:01:29 20
           Q. And you were here for Mr. Sheasby's opening, right?
           A. I reviewed the transcript.
11:01:32 21
           Q. And you recall Mr. Sheasby highlighted this particular
11:01:35
       22
11:01:38 23
           patent as particularly important, right?
11:01:43 24
           A. I believe all patents were, but --
           Q. Well -- I apologize, Dr. Madisetti. Were you finished?
11:01:46 25
```

- 11:01:49 1 A. Yes.
- 11:01:50 2 Q. Now, he said it was ranked by the Innography group,
- 11:01:54 3 right?
- 11:01:54 4 A. Yes.
- 11:01:58 5 Q. Now -- and you know that the -- the lead inventor on
- 11:02:07 6 this patent is Mr. Dae Won Lee, correct?
- 11:02:10 7 A. Yes, Dr. Lee.
- 11:02:14 8 Q. I apologize. Now, you talked about the lead inventor,
- 11:02:18 9 Dr. Lee on your direct, correct?
- 11:02:22 10 A. Yes, briefly.
- 11:02:24 11 Q. You said he was one of your students, correct?
- 11:02:27 12 | A. He was one of the students at Georgia Tech.
- 11:02:30 13 Q. And you said -- I believe you used the words he was a
- 11:02:32 14 prolific inventor, correct?
- 11:02:33 15 A. Yes.
- 11:02:33 16 Q. Now, he's not going to come and sit on the stand in
- 11:02:37 17 | this trial and take questions, is he?
- 11:02:39 18 A. I'm not sure as to what you're asking me.
- 11:02:42 19 | Q. He's not going to testify at this trial, right?
- 11:02:45 20 A. I don't think so.
- 11:02:46 21 | Q. He's not going to come here and tell the jury that this
- 11:02:49 22 patent is important, right?
- 11:02:54 23 A. Again, I don't -- I don't think he'll be here, but I'm
- 11:02:58 24 not the right person to ask that.
- 11:02:59 25 Q. He's not going to come and tell this jury that the

```
Qualcomm and Intel chips use his invention, correct?
11:03:02
         1
11:03:05
                    MR. POLLINGER: Your Honor, I object. He's
         2
            creating the suggestion that that's a legal requirement
11:03:07
            that the inventor be here to testify as to his patent.
11:03:09
            He's asked his question again and again.
11:03:15
11:03:16
                    THE COURT: I'll sustain on the repetitive nature.
         6
        7
                    The ground has been covered. Let's move on.
11:03:21
               (By Mr. Summersgill) Now, Dr. Madisetti, we do know
11:03:23
            Q.
        8
            one thing that the inventor said about this patent, right?
11:03:25
        10
11:03:33
            A. I'm not sure as to what you mean.
            Q. Well, you told the jury that the '332 patent disclosed
11:03:34
        11
11:03:39
       12
            an important new invention in the industry, correct?
11:03:42
       13
           A. Yes.
            Q. But that's not how the inventors described their idea
11:03:43
       14
11:03:47
       15
            for the '332 patent before this lawsuit, is it?
            A. I disagree. I believe that they proposed it to the
11:03:50
       16
            standards body and they felt it was very important.
11:03:56
       17
            Q. Well, let's turn to Tab 12, which is DTX-171.
11:04:00
       18
11:04:08
       19
                    MR. SUMMERSGILL: And if we can put that up on the
11:04:10 20 screen.
               (By Mr. Summersgill) You've seen this before, correct?
11:04:11
       21
            Q.
11:04:17
       22
            Α.
               Yes.
11:04:18
       23
           Q. And this is a series of emails written by Mr. Dae Won
11:04:21
       24
          Lee in March 2008, correct?
           A. That's what it says here.
11:04:24 25
```

```
1 | Q. He's the -- again, the first named inventor of the '332
11:04:26
           patent, correct?
11:04:30
           A. Yes. Dae Won Lee is the inventor, and that's what this
11:04:30
11:04:33
            says.
            Q. And in this series of emails, Mr. Lee was -- I'm sorry,
11:04:34
         5
11:04:38
            Dr. Lee was describing the inventor's proposal that
            ultimately became the '332 patent, correct?
11:04:41
            A. I have to look at the entire email, but I believe this
11:04:45
         8
11:04:49
            is one of the emails that was discussing the proposal.
        10
11:04:52
            Q. And in this email, Dr. Lee describes an equation,
           correct?
11:04:58
       11
11:04:58
       12
           A. Yes.
            Q. And the equation that he describes in this email is the
11:04:59
       13
11:05:03
       14
            same equation that's in the claims of the '332 patent,
11:05:07
       15
           correct?
            A. It's a portion of it.
11:05:07
            Q. And you told the jury -- I believe the word you used
11:05:13
       17
           was this was a critical new way for mobile devices to
11:05:16
       18
            search the PDCCH, correct?
11:05:19
       19
11:05:21
       20
            A. Yes, it is a -- it's a very important -- the previous
            approaches were -- had a critical flaw in them.
11:05:25
       21
11:05:28
       22
            Q. But in his email, Dr. Lee wrote, quote, what we are
11:05:36 23
            proposing is nothing new really, correct?
11:05:41 24
                    MR. SUMMERSGILL: If we could pull that up on the
```

screen. It's down at the bottom of the page.

11:05:43 25

```
11:05:46
         1 A. Yes.
           Q. (By Mr. Summersgill) Do you see the -- the -- the
11:05:48
           first line of that last paragraph, Dr. Madisetti?
11:05:50
           A. Yes.
11:05:53
           Q. So Dr. Lee wrote that what we are proposing is nothing
11:05:54
         5
11:05:59
           new really, correct?
        7
           A. That's what he wrote. As I said, I can explain this in
11:06:01
        8 detail.
11:06:05
11:06:06
           Q. And then he went on to say at the bottom of that
           paragraph, quote, what we are proposing is to use what is
11:06:10 10
11:06:15
           well-known equation, correct?
       11
11:06:17 12
           A. Yes, that text appears in this email. But I can
11:06:20 13
           explain.
           Q. Those were the first inventors -- the first named
11:06:20 14
11:06:27 15
            inventor's words, correct?
           A. Yes. As I said, he was being very modest.
11:06:29 16
11:06:33 17
                   MR. SUMMERSGILL: Your Honor, I'll move to strike.
                    THE COURT: I don't think that's offensively
11:06:38 18
           non-responsive. I'll overrule.
11:06:41 19
11:06:42 20
           Q. (By Mr. Summersgill) So those are the words that the
           lead inventor of the '332 patent said before this lawsuit
11:06:44 21
11:06:51 22 | was filed, correct?
11:06:52 23 A. Yes.
11:06:53 24
           Q. And you never bothered to ask that inventor, Dr. Lee,
           what he meant by this email, correct?
11:06:57 25
```

A. I did not ask him. 11:06:59 1 And Mr. -- Dr. Lee isn't here to explain it, right? 11:07:05 Q. 11:07:08 3 A. I agree. Q. Now, you told the jury on direct that the '332 patent 11:07:09 describes a better way for mobile devices to calculate 11:07:13 5 11:07:17 where to begin searching on something called the PDCCH, 7 correct? 11:07:20 A. Yes, among other things. 11:07:20 8 Q. And if we could turn to Claim 6 of the '332 patent, 11:07:24 which is PX-2, and it's at Tab 18 of your binder, 11:07:29 10 11:07:33 11 Dr. Madisetti. A. Yes, I'm looking at it on the screen. 11:07:33 12 11:07:36 13 Q. Now, this is one of the two claims that you told the jury is infringed, correct? 11:07:39 14 11:07:40 15 A. Yes. Q. Now, Optis claims that this -- argues that this claim 11:07:40 is literally infringed, correct? 11:07:48 17 11:07:50 18 A. Yes. Q. And neither you nor Optis have made an argument under 11:07:50 19 11:07:56 20 the Doctrine of Equivalents, right? A. You are right. 11:07:58 21 11:07:59 22 Q. Now, to prove infringement, the Plaintiffs must show 11:08:01 23 that Apple's products meet every element of this claim, 11:08:05 24 right?

11:08:05 25

A. Yes.

1 | Q. And Claim 6 requires a mobile device to perform a 11:08:06 11:08:12 specific math equation, correct? A. Among other things, a particular math expression. 11:08:15 Q. And if you look down in the third limitation, it 11:08:22 requires something called a modulo "C" operation wherein 11:08:25 "C" is determined as floor (N/L), correct? 11:08:29 A. Yes. 11:08:34 7 Q. And a lot of technical language, but that's a math -- a 11:08:36 8 11:08:40 specific math operation, correct? A. That's a specific math expression. 11:08:42 10 11:08:44 Q. So the claim requires using that calculation as part of 11 11:08:49 12 the equation to figure out where to begin searching the PDCCH, right? 11:08:54 13 A. Yes, among other things. 11:08:55 14 11:08:57 15 Q. And we can agree that Claim 7 has the same requirement, 11:09:01 16 correct? 11:09:01 17 A. Yes. Q. Now, Apple says that its products don't perform that 11:09:01 18 operation, this floor(N/L) operation of the claims, 11:09:14 19 11:09:17 20 correct? 11:09:17 21 A. Yes. That's my high-level understanding, yes. 11:09:20 22 Q. And if the jury agrees with Apple, then there's no 11:09:22 23 infringement of these claims, correct? 11:09:24 24 A. Yes, I agree. If it doesn't meet the limitation, it

won't meet that limitation.

11:09:29 25

11:09:30 1 Q. Now, you're familiar with a concept of an operator in a programming language, correct? 11:09:35 A. You have to be a little more specific. 11:09:36 Q. You're -- you're familiar with the concept of an 11:09:39 operator, right? 11:09:42 A. As a part of language, yes. At a high level, yes. 11:09:44 Q. And programming languages use different operators to 11:09:48 perform different functions, correct? 11:09:52 A. I disagree with that. 11:09:53 10 Q. Okay. Well, we can agree that the source code for 11:09:55 Intel and Qualcomm's chips include code written in the C 11:09:58 and the C++ programming languages, right? 11:10:03 12 11:10:07 13 A. Yes. Q. And the C programming language has one operator called 11:10:08 14 11:10:12 a divide, correct? 15 11:10:15 A. Yes. It has many operators for the divide. MR. SUMMERSGILL: Your Honor, may I approach the 11:10:20 17 whiteboard? 11:10:22 18 THE COURT: You may. You may use the chart. 11:10:23 19 11:10:26 20 MR. SUMMERSGILL: Thank you. 11:10:27 21 | Q. (By Mr. Summersgill) And that operator is shown with a 11:10:30 22 forward slash, correct? 11:10:31 23 A. As I said, I disagree with your question. I said: 11:10:35 24 has many operators for the divide.

Q. Well, the C programming language has another operator

11:10:37 25

```
called a right shift, correct?
11:10:43
         1
11:10:46
            A. Yes, but that's also divide.
            Q. And the right shift is shown with a different symbol,
11:10:48
         3
            two forward arrows, correct?
11:10:53
                I didn't understand your question. Again?
11:10:56
         5
            Q. The shift --
11:11:02
        7
                     THE COURT: Let me interrupt for just a minute.
11:11:03
            Ladies and gentlemen, there's a very brief matter I need to
11:11:05
            take up with the parties outside of your presence. Please
11:11:07
            give me just a minute with you outside the courtroom, and
11:11:10
       10
            I'll have you right back in here.
11:11:12
        11
       12
                     If you'll leave your notebooks in your chairs and
11:11:15
11:11:17
       13
            not discuss the case among yourselves, I promise you, this
            will be very short. Please retire to the jury room for
11:11:20
       14
11:11:23
       15
            just a minute.
                    COURT SECURITY OFFICER: All rise.
11:11:25
       16
11:11:26
       17
                     (Jury out.)
                     THE COURT: Please be seated.
11:11:26
       18
                     I fully understand the trial process where
11:11:48
       19
11:11:58
       20
            co-counsel are in some form of communication with the
            counsel who's taking a witness.
11:12:02
        21
11:12:04
       22
                     Mr. Sheasby, I've lost count how many times you
11:12:07 23
            have popped up and walked around this courtroom while
11:12:11
       24
            Mr. Summersgill was crossing the witness or while
            Mr. Pollinger was directing the witness. This is not your
11:12:15 25
```

```
witness, and you've done everything you could to make it
11:12:17
         1
11:12:20
            your witness, including trying to argue objections to me
            after we came back from the prior recess.
11:12:24
                     If you want to pass notes to Mr. Pollinger and
11:12:27
            hold his hand, then I suggest you move the corporate
11:12:29
11:12:33
            representative from that seat, and you sit right next to
        7
            him.
11:12:36
                     But it's highly dis -- distracting, at least it is
11:12:36
         8
11:12:40
            to me, so I assume it is to the jury, to have you move
            around and pop up and down and lean over with your laptop
11:12:43
        10
11:12:46
            in front of Mr. Pollinger and give him the ongoing
        11
            instructions that you're giving him. You need to let it
11:12:49
        12
            go. This is not your witness.
11:12:55
        13
                     And I'll say this: I have never seen a corporate
11:12:57
        14
11:12:59
        15
            representative on the Apple side stand up and pass notes to
            the lawyer three or four or five times.
11:13:03
        16
11:13:06
        17
                     I assume you're not part of the trial team, sir.
            I assume you're here merely to represent the Defendant --
11:13:09
        18
                     MR. MUELLER: I apologize. I just asked him --
11:13:12
       19
11:13:13
       20
                     THE COURT: Is he your go-between?
                     MR. MUELLER: I apologize. I asked Mr. Blevins to
11:13:16
        21
11:13:17
        22
            pass it so we -- it was -- it was me, Your Honor, not him.
11:13:19
        23
                     THE COURT: The interaction of lead counsel with
11:13:22
        24
            these very qualified lawyers who now have this witness is
            becoming disrupt -- distracting. And it needs to be
11:13:24
       25
```

```
moderated. I'm not saying that it must be stopped
11:13:28
        1
            completely. I -- I know what it's like to try and help
11:13:31
            someone who's on your trial team. But this is beginning to
11:13:35
         3
11:13:38
            get out of hand, okay?
                    MR. MUELLER: Understood.
11:13:39
         5
11:13:40
                    MR. SHEASBY: I understand, Your Honor.
         6
        7
                    THE COURT: Let's bring the jury back in.
11:13:41
                    COURT SECURITY OFFICER: All rise.
11:13:44
         8
                     (Jury in.)
11:13:46
         9
                    THE COURT: Thank you, ladies and gentlemen.
11:14:14
       10
       11 | Please have a seat.
11:14:15
                    And we'll continue with the cross-examine of the
11:14:16
       12
11:14:22
       13
            witness -- cross-examination of the witness by the
           Defendant.
11:14:24 14
11:14:24 15
                    Please proceed.
                    MR. SUMMERSGILL: Thank you, Your Honor.
11:14:25 16
            Q. (By Mr. Summersgill) Now, Dr. Madisetti, before the
11:14:26
       17
            break, we were talking about the divide symbol, the forward
11:14:27
       18
            slash symbol, and the right shift symbol, right?
11:14:33
       19
11:14:35 20
            A. Yes. But I don't agree with your characterization of
            those symbols.
11:14:39
       21
       22
            Q. Now, Apple contends that the Qualcomm and Intel chips
11:14:39
11:14:44
       23
            don't infringe because they perform this shift operation
11:14:48 24
            instead of a divide operation, correct?
           A. Yes. That's how I understand Apple's position to be.
11:14:52 25
```

```
1 | Q. Now, you've taken the position in this case that a
11:14:56
          shift is the same thing as a floor (N/L) operation, correct?
11:14:59
11:15:06
        3 A. Yes.
11:15:06
           Q. But we can agree that if one operation is simpler than
           another operation, they aren't the same thing, correct?
11:15:12
           A. I disagree.
11:15:14
           Q. Well, let's turn to Tab 11 in your binder, and this is
11:15:15 7
11:15:26
        8 a -- a journal paper from 1994, correct?
           A. Yes.
11:15:36
11:15:45 10 Q. And it lists V. Madisetti as one of the editors,
11:15:53 11 | correct?
11:15:53 12 A. Yes.
11:15:53 13
           Q. And that's you, correct?
11:15:55 14 A. Yes.
11:15:55 15
           Q. And if you turn the page to 128, this is one of the
11:16:04 16 articles --
                   MR. SUMMERSGILL: I'm sorry, you can go back to
11:16:05 17
11:16:07 18 the cover page.
           Q. (By Mr. Summersgill) -- this is one of the articles
11:16:09 19
11:16:11 20
           that was in that set of articles that you edited, correct?
11:16:14 21 A. I didn't edit the article. I edited the -- the book.
11:16:17 22 Q. Okay. But this article is in the book that you edited,
11:16:26 23 correct?
11:16:26 24 A. Yes.
          Q. Now, if we turn to Page 128, this article states,
11:16:26 25
```

```
11:16:33
         1 | quote --
11:16:34
                    MR. SUMMERSGILL: And if we could pull that up.
            Q. (By Mr. Summersgill) Well, Dr. Madisetti, you've got
11:16:36
            it in front of you.
11:16:47
                     It states: In each iteration, there's a division
11:16:48
         5
11:16:51
            by 2, and this takes care of a correct division as at
            stage i, the iteration number is a minus i, and the
11:16:59
            division of the original input is by 3^{n-i-1} [sic].
11:17:05
        8
11:17:15
                    Do you see that?
          A. I don't.
11:17:16 10
11:17:17
       11 Q. This is Tab 1 -- I'm sorry, Tab -- Tab 24 in your
11:17:24 12 binder.
11:17:43 13
           A. Okay.
11:17:44 14
           Q. So you see the sentence I read, sir?
11:17:46 15
           A. Which page, sir?
11:17:48 16 Q. Page 128. Page 128 in the left column following the
11:18:02 17 code?
           A. Yes, I see a sentence here.
11:18:02
       18
            Q. And it refers to using a division, correct?
11:18:04
       19
11:18:11
       20
            A. Yes. Yes, it says something about a division.
            Q. And then in the next sentence it says, quote, a simpler
11:18:16 21
11:18:21
       22
            way is to write the inputs in binary and shift to right,
11:18:27 23
            dropping LSB each time, as this is equivalent to a division
11:18:32 24
           by 2.
11:18:32 25
                   Do you see that?
```

```
1 A. I see that. It's the same as the division. That's
11:18:33
           what I said.
11:18:35
        3 Q. The paper is saying that you get the same answer but
11:18:36
           that the shift is a simpler way, correct?
11:18:41
           A. Again, I didn't write this paper, but my understanding
11:18:44
           is that the shift and the division are one and the same.
11:18:49
           Q. Well, we can agree that code that is faster and
11:18:52
           requires fewer steps, even if it gets the same answer, is
11:18:55
           better than code that's slower and requires more steps,
11:18:59
11:19:05 10
           right?
           A. I cannot provide a yes or no answer for that.
11:19:05
11:19:08 12 | Q. Well, you traveled from Atlanta, Georgia, to Marshall
11:19:12
       13 to get here for the trial, correct?
11:19:14 14 A. Yes.
11:19:14 15 | Q. There's more than one way to get from Atlanta to
11:19:18 16 | Marshall, Texas, correct?
11:19:19 17 A. Yes.
           Q. You could fly, right?
11:19:22 18
11:19:23 19 A. Yes.
11:19:23 20 Q. You could drive, right?
11:19:25 21 A. Yes.
11:19:27 22 Q.
              And you could walk, correct?
11:19:29 23 A. Yes.
11:19:29 24 Q. Each of those ways will get you to Marshall, Texas,
11:19:35 25 correct?
```

- 11:19:35 1 A. Yes.
- 11:19:35 2 Q. But some ways are faster than others, correct?
- 11:19:41 3 A. Yes. In your example, yes.
- 11:19:42 $4 \mid Q$. Some ways are better than others, correct?
- 11:19:46 5 A. In your example, yes.
- 11:19:47 6 Q. So just because you get to the same place, doesn't mean
- 11:19:51 7 you got there the same way, correct?
- 11:19:52 8 A. In your example, yes. But in this example, the
- 11:19:55 9 division and the shift are one and the same.
- 11:19:57 10 Q. Now, Dr. Madisetti, can we now turn to the third patent
- 11:20:03 11 | that you analyzed, the '833 patent?
- 11:20:07 12 A. Yes.
- 11:20:07 13 Q. Now, you're aware that the Plaintiffs are asking Apple
- 11:20:10 14 to pay hundreds of millions of dollars for this patent
- 11:20:14 16 A. I'm not aware of the exact numbers, but if that's what
- 11:20:19 17 you represent, I will go with it.
- 11:20:21 18 Q. You know it's a whole lot of money, correct?
- 11:20:24 19 A. Again, I -- I don't have the numbers.
- 11:20:26 20 | Q. Now, LG Electronics was the original owner of the '833
- 11:20:32 21 patent, correct?
- 11:20:32 22 A. I believe so.
- 11:20:33 23 Q. And you were here for Mr. Sheasby's opening statement
- 11:20:37 24 | in this case, correct?
- 11:20:37 25 A. I reviewed the transcript. I was not here personally.

```
11:20:40
         1 Q. Okay.
                    MR. SUMMERSGILL: Well, could we pull up PDX-1.13
11:20:42
         2
           from Mr. Sheasby's opening statement?
11:20:47
        3
           Q. (By Mr. Summersgill) Do you recall from the transcript
11:20:50
           that Mr. Sheasby used this slide in his opening?
11:20:52
11:20:57
           A. Yes, I -- I generally recall.
        7
           Q. And LG is over on the left side. Do you see that?
11:21:00
11:21:02
           A. LGE, yes.
        8
11:21:03
           Q. And that's LG Electronics, correct?
       10 A. Yes.
11:21:07
       11 | Q. And it shows that LG has nearly 90,000 patents in its
11:21:07
11:21:13 12 portfolio, correct?
11:21:13 13
           A. Yes. As of 2011, yes.
           Q. We can agree that's a lot of patents, right?
11:21:22 14
11:21:24 15
           A. Yes.
           Q. And you know that LG decided to transfer the '833
11:21:25 16
11:21:29 17 patent to Optis, correct?
                    MR. POLLINGER: Objection, lack of foundation.
11:21:34
       18
                    THE COURT: If he knows, he can answer. If he
11:21:36 19
11:21:43 20 | doesn't know, he can say I don't know.
11:21:46 21
                    THE WITNESS: Okay.
11:21:46 22
                    THE COURT: Overruled.
11:21:47 23
           A. My understanding is that the other companies chose the
11:21:52 24
           patents, not LG. So this way the -- again, I don't have a
           specific understanding. I have a general understanding
11:22:00 25
```

```
11:22:02
         1
           that the quality was unsure because the other parties chose
           the patents of LG.
11:22:06
                    Similarly, LG chose the patents of the other
11:22:08
         3
           parties to make sure that the parties were of the highest
11:22:12
            quality -- the patents were of the highest quality.
11:22:17
11:22:21
            Q. (By Mr. Summersgill) Sir, LG kept thousands and
            thousands of patents in its portfolio, correct?
11:22:23
           A. Again, I don't have specific information as to prove
11:22:25
           that issue.
11:22:28
           Q. But you can see it on Mr. Sheasby's chart, correct?
11:22:29
       10
           A. I can see on the chart that LG has a lot of patents.
11:22:31
        11
11:22:33 12
           Q. And LG was willing to transfer this patent, the '833
11:22:37
       13
           patent, to Optis, correct?
           A. Again, I cannot go into specifics. I don't have the
11:22:42
       14
11:22:46 15
            knowledge. All I know is that the other parties were
           selecting patents to ensure the patents were of the highest
11:22:49 16
           quality.
11:22:54 17
           Q. Dr. Madisetti, could you please turn to PX-1571, which
       18
11:22:54
            is also Tab 21 in your binder?
11:22:58 19
11:23:00 20
           A. Yes, sir.
11:23:01 21
           Q. That's the '833 patent, correct?
11:23:02 22
           A. Yes.
11:23:03 23 Q. And Plaintiffs allege that Apple's products infringe
11:23:10 24 | Claim 8, correct?
11:23:11 25
           A. Yes.
```

Q. Now, this claim describes the mapping of a type of 11:23:11 1 11:23:15 signal called an SC-FDMA signal, correct? A. I would disagree. I would say the claims speak for 11:23:22 3 themselves. 11:23:25 MR. SUMMERSGILL: I'm sorry, can we put Claim 8 11:23:25 5 11:23:29 up, please? 6 7 Q. (By Mr. Summersgill) The claim refers to an SC-FDMA 11:23:30 symbol, correct? 11:23:35 11:23:35 A. Yes, that's called a Single-carrier Frequency Division Multiple Access symbol. 11:23:40 10 11:23:40 Q. And as you explained yesterday, the claim also refers 11 to columns and rows, correct? 11:23:43 12 A. As a part of the claim, as claimed? 11:23:44 13 Q. And each one of those columns corresponds to an SC-FDMA 11:23:48 14 11:23:56 15 symbol, correct? A. Which portion of the claim are you referring to? 11:23:56 16 11:23:59 Q. Well, if you look at -- I can't see the line where it 17 states: Wherein the number of columns of the 2-dimensional 11:24:09 18 resource matrix corresponds to a number of SC-FDMA symbols. 11:24:13 19 11:24:13 20 MR. SUMMERSGILL: Down a little bit further, Mr. Lee. Down a little further, starting with that line. 11:24:13 21 11:24:22 22 (By Mr. Summersgill) Do you see that, Dr. Madisetti? Q. 11:24:23 23 A. Yes. That only refers to the number. It does not say 11:24:26 24 the columns are the symbols. Q. Well, okay. Now, let's focus on the part of the claim

11:24:29 25

```
1 starting at Column 10, Line 17.
11:24:31
                    It states, quote, the multiplex signals are mapped
11:24:39
        2
        3 from the first column of the first row to the last column
11:24:43
           of the first row, comma, the first column of the second row
11:24:46
        5 to the last column of the second row, and so on, until all
11:24:53
11:24:59
           the multiplexed signals are mapped to the 2-dimensional
           resource matrix. Do you see that?
11:25:07 7
11:25:09
           A. I see that.
        8
           Q. And that's what the claim says, right?
11:25:10
           A. Yes.
11:25:12 10
11:25:13 11
                   MR. SUMMERSGILL: Your Honor, may I use a
11:25:16 13
                   THE COURT: You may.
11:25:19 14 Q. (By Mr. Summersgill) Now, Dr. Madisetti, okay if we
11:25:24 15
           map that out on this demonstrative?
           A. Yes, I can see a portion of it. I mean, is it --
11:25:28 16
11:25:31 17
                   THE COURT: Bring the easel forward, please,
11:25:34 18 counsel.
                   MR. SUMMERSGILL: Yes, Your Honor.
11:25:34 19
11:25:52 20 | Q. (By Mr. Summersgill) Now, Dr. Madisetti, this is the
           first column of the first row, correct?
11:25:54 21
11:25:57 22
           A. First column of the first row, yes, sir.
11:25:59 23 Q. And this is the last column of the first row, correct?
11:26:03 24 A. Yes.
11:26:04 25 Q. And the claim says that you map from the first column
```

- 1 of the first row to the last column of the last row, 11:26:08 11:26:12 correct? 2 A. Yes. That's what you do. You start on the left, and 11:26:12 11:26:14 you go column-by-column to the right. Q. And then the claim says you go to the first column of 11:26:16 11:26:21 the second row, correct? 7 A. Yes. 11:26:22 Q. And you map across to the last column of the second 11:26:23 11:26:28 row, correct? 11:26:28 10 A. Yes. 11:26:29 Q. And the claim says you keep doing that until the whole 11 matrix is mapped, correct? 11:26:33 12 11:26:35 13 A. Yes. Q. Now, I'm going to refer to that as row-by-row mapping, 11:26:36 14 11:26:45 15 okay? A. It's your call. I mean, I would call it by the 11:26:45 language in the claim. 11:26:48 17 Q. Well, what the language in the claim describes is 11:26:49 18 exactly what we just did on that chart, correct? 11:26:54 19 11:26:57 20 A. Yes, for each row there's a column-by-column mapping. Q. Now, Apple says it doesn't infringe this claim because, 11:27:03 21 11:27:07 22 among other things, it says its products map symbols 11:27:12 23 column-by-column, correct? 11:27:15 24 A. Yes, that's what Apple says.
- Q. And so Apple says it maps from the top of one column to 11:27:17 25

```
1 | the bottom of a column, correct?
11:27:22
           A. Yes, that's what Apple says.
11:27:24
            Q. And Apple says that once it's mapped one column, which
11:27:25
         3
            corresponds to a symbol, it's able to just send that
11:27:30
           symbol, correct?
11:27:33
         5
11:27:34
            A. Yes, that's what Apple says, which I disagree.
            Q. Well, Dr. Madisetti, row-by-row mapping is different
11:27:38
        7
            from column-by-column mapping, correct?
11:27:45
           A. Again, I disagree. I can explain.
11:27:48
            Q. Sir, isn't it true that you've taken the position in
11:27:51
        10
11:27:53
           this case that row-by-row mapping is distinct from
        11
11:27:58
       12
           column-by-column mapping?
11:27:59
       13
           A. I disagree. I can explain.
                    MR. SUMMERSGILL: Well, can we please pull up --
11:28:02
       14
11:28:07
       15
           Q. (By Mr. Summersgill) Dr. Madisetti, take a look at
            Tab 8, please, which is one of your expert reports?
11:28:10
       17
                    MR. SUMMERSGILL: And I'd ask that we please pull
11:28:12
           up Paragraph 79 from Dr. Madisetti's rebuttal expert
11:28:15
       18
11:28:23 19
           report.
11:28:23 20
           A. My rebuttal report?
11:28:26 21
           Q. (By Mr. Summersgill) Correct.
11:28:26
       22
           Α.
               Okay.
11:28:28 23
           Q. And that is Tab 8.
11:28:33 24
           A. Are you going to put it up or --
11:28:36 25
                   MR. SUMMERSGILL: Yes, please, please, put it up.
```

(By Mr. Summersgill) And do you see that, sir? 11:28:39 1 Q. A. Do I see what? 11:28:40 Q. Your expert report. I thought maybe you had it in 11:28:44 front of you. We'll work on getting it up on the screen, 11:28:47 Dr. Madisetti. 11:28:51 11:28:59 While we're waiting for it to be put on the screen, would you mind --11:29:02 7 A. Which volume should I go --11:29:03 8 Q. It's Tab 8, Volume 1, I believe. 11:29:06 A. I'll go there. Which page would you like me to go to, 11:29:09 10 11 | sir? 11:29:21 Q. Paragraph 79, Page 37. And let me know when you're 11:29:21 12 13 11:29:24 there. 11:29:36 14 Now we have it up on the screen, Dr. Madisetti. 11:29:40 15 A. Okay. Q. Okay. Again, this is your expert report, correct? 11:29:40 16 A. Yes, it's my rebuttal expert report. 11:29:44 17 Q. And here you were talking about some of the prior art 11:29:45 18 11:29:48 19 references at issue in this case, correct? 11:29:50 20 A. Yes, I was using Dr. Wells's terminology. This is not mine. 11:29:53 21 11:29:54 22 Q. In your report, sir, you distinguished between mapping 11:29:58 23 signals row-by-row and mapping signals column-by-column, 11:30:01 24 right?

A. Yes, I was using Dr. Wells.

11:30:01 25

```
Q. Well, what you said was the Qualcomm reference, on the
11:30:06
         1
            left, maps its signals row-by-row, correct?
11:30:12
         3
            A. Yes, I was referring to Dr. Wells. It's not an
11:30:18
            admission that it does. It was just citing Dr. Wells.
11:30:22
            Q. Sir, that's what you said in your expert report,
11:30:25
         5
11:30:27
            correct?
            A. Yes.
11:30:27
        7
            Q. And then you included that picture on the left showing
11:30:28
        8
            row-by-row mapping, correct?
11:30:31
       10
            A. Yes, that's the picture from Dr. Wells.
11:30:35
            Q. And you then said that the Malladi reference '161 maps
11:30:36
        11
11:30:44
       12
            its signals column-by-column, correct?
11:30:48
       13
            A. Yes, that's Dr. Wells's pictures that I reproduced.
            Q. And you include the picture on the right showing
11:30:51
       14
11:30:53
       15
            column-by-column mapping, correct?
            A. Yes, as I said, Dr. Wells drew that picture. Not me.
11:30:55
       16
            Q. And that wasn't the only time you referred to -- you
11:30:59
       17
            distinguished row-by-row and column-by-column mapping, was
11:31:02
       18
            it?
11:31:09
       19
11:31:09
       20
            A. Again, you have to be more specific than that. I --
            Q. Well, let's --
11:31:13
       21
11:31:15
       22
                    MR. SUMMERSGILL: Let's pull up Paragraph 113 of
11:31:19 23
           your expert report, please.
11:31:23 24
            Q. (By Mr. Summersgill) Sir, on at least five different
```

instances in your report, you -- you distinguished

11:31:26 25

- 11:31:30 1 row-by-row from column-by-column mapping; isn't that right?
- 11:31:34 2 A. As I said, I used Dr. Wells's terminology. I did not
- 11:31:38 3 admit that either of those references had mapping, and I
- 11:31:41 4 | think I explained that in my deposition.
- 11:31:43 5 Q. Well, as part of your analysis, you looked at the
- 11:31:45 6 source code for the Intel and the Qualcomm baseband chips
- 11:31:51 7 used in the Apple products, correct?
- 11:31:54 8 A. Yes, sir.
- 11:31:54 9 Q. And you would agree that the source code in both the
- 11:31:57 10 Intel and Qualcomm baseband chips maps its signals
- 11:32:02 11 column-by-column instead of row-by-row, correct?
- 11:32:05 12 A. I disagree.
- 11:32:07 13 Q. Well, turn to Tab 2, your deposition, Page 393, Lines 8
- 11:32:17 14 to 19.
- 11:32:21 16 Q. And you were asked that question there and you gave
- 11:32:27 18 A. I was not asked that question, sir. I disagree.
- 11:32:31 19 Q. You disagree that you were asked that question?
- 11:32:34 20 A. Yes. The question says, first and second resource
- 11:32:37 21 elements.
- 11:32:37 $22 \mid Q$. Sir, that is a question and answer from your deposition
- 11:32:41 23 on June 4th of this year, correct?
- 11:32:44 24 A. Yes, that's correct.
- 11:32:46 25 | Q. And you answered that -- you provided that answer,

```
1 | correct?
11:32:49
11:32:49
            A. Yes, to a different question.
                    MR. SUMMERSGILL: Let's pull up Dr. Madisetti's
11:32:51
         3
            deposition, Page 393, Lines 8 to 19.
11:32:54
            Q. (By Mr. Summersgill) You were asked:
11:32:58
         5
                     Question: Based on the way that the source code
11:33:00
         6
            works and the source code executes, when the source code
        7
11:33:04
            runs in the Qualcomm and Apple processors, which resource
11:33:07
        8
            element is mapped first and which resource element is
11:33:11
            mapped second sequentially by the code?
11:33:15
        10
11:33:21
        11
                    Answer: I said they are mapped column-by-column
            in a temporally segmented manner, starting at the top left,
11:33:29
       12
            as described in Column 5 of Lines 45 to 55 of the '833
11:33:34
       13
            patent. And I've verified that and provided detailed
11:33:39
       14
            description of the code in my report, as well as my
11:33:43
       15
            reliance on Dr. Jones's report and the analysis that I've
11:33:47
       16
            done personally on the source code computer.
11:33:52
       17
                    You were asked that question and you gave that
11:33:54
       18
            answer, correct?
11:33:57
       19
       20
11:33:57
            A. Yes, I can explain. It's fully consistent with my
            opinions.
11:33:59
       21
11:33:59
       22
            Q. And you gave that answer after you'd studied the source
11:34:01 23
            code, correct?
11:34:02 24
            A. Yes.
            Q. You'd verified your analysis?
11:34:02 25
```

```
1 | A. Yes. I can explain.
11:34:04
               You'd carefully analyzed the products, correct?
11:34:05
            Q.
            A. Yes.
11:34:09
         3
            Q. And -- but today you're telling the jury that Apple
11:34:10
            products really map row-by-row, correct?
11:34:15
11:34:17
            A. Yes. As I explained, the 2D matrix is mapped
            row-by-row. That particular column -- the first column is
11:34:21
        7
            mapped column-by-column -- the first row is mapped
11:34:27
11:34:28
            column-by-column because this --
        9
                    THE COURT: Dr. Madisetti, you're launching into
11:34:29
       10
            an explanation he didn't call for. And as I've reminded
11:34:31
        11
            you, Mr. Pollinger is going to get to ask you more
11:34:35
       12
11:34:37
       13
            questions. And if he thinks it needs to be explained
            again, he'll ask you to explain it.
11:34:41
       14
11:34:43
       15
                    But once you've answered Mr. Summersgill's
            question, you need to leave it at that. Do you understand?
11:34:46
       16
       17
                    THE WITNESS: I'm sorry, Your Honor.
11:34:50
       18
                    THE COURT: All right. Let's proceed.
11:34:51
            Q. (By Mr. Summersgill) Dr. Madisetti, today you're
11:34:54
       19
11:34:56
       20
            telling this jury that the Apple products really map
       21
            row-by-row, correct?
11:35:00
11:35:01
        22
            A. I'm -- could I clarify -- I mean, your question is not
11:35:05 23
            specific enough.
11:35:06 24
            Q. Dr. Madisetti, you told the jury on direct that Apple
            products map row-by-row, correct?
11:35:12 25
```

```
1 A. As in the claim.
11:35:14
           Q. Now, the source code didn't change between June 4 and
11:35:15
        3 | today, did it?
11:35:21
           A. No.
11:35:22
           Q. The only thing that changed is that you started to
11:35:23
        5
           prepare for trial with the lawyers, correct?
11:35:25
11:35:28 7
           A. Yes.
                    MR. SUMMERSGILL: Pass the witness.
11:35:31
        8
                    THE COURT: If you'll take your demonstrative
11:35:33
         9
11:35:35
       10
           down, please, counsel.
        11
                    MR. SUMMERSGILL: Yes, sir.
11:35:37
                    THE COURT: I assume there's redirect,
11:35:37
       12
11:35:40 13 Mr. Pollinger?
                    MR. POLLINGER: Yes, Your Honor.
11:35:41
       14
11:35:41 15
                    THE COURT: All right. When you're
11:36:05 16 ready, please proceed with your redirect, counsel.
11:36:09
       17
                   MR. POLLINGER: Thank you, Your Honor.
11:36:09
       18
                                REDIRECT EXAMINATION
11:36:10 19 BY MR. POLLINGER:
11:36:10 20
           Q. Professor Madisetti, Mr. Summersgill asked you a number
11:36:13 21
            of questions about your work as an expert in other cases.
11:36:21
        22
                    Have you ever been asked by Apple's law firm here,
11:36:26 23 | Wilmer Hale, to work with them on behalf of one of their
11:36:34 24 clients?
           A. Yes.
11:36:34 25
```

- 11:36:34 1 Q. Has that happened recently?
- 11:36:35 2 A. Yes. I'm still working for them.
- 11:36:45 3 Q. Professor Madisetti, Mr. Summersgill asked you a number
- 11:36:50 4 of questions regarding the inventors on these patents and
- 11:36:57 5 whether or not you spoke to the inventors.
- 11:37:03 6 Now, you've testified that you worked in a lot of
- 11:37:07 7 these patents cases.
- 11:37:10 8 What determines whether there's infringement in a
- 11:37:14 9 patent case?
- 11:37:15 10 A. Just the claims. Only the claims matter because claims
- 11:37:20 11 | are what describe and limit the invention.
- 11:37:25 12 | Q. Does an inventor's testimony determine whether there's
- 11:37:30 14 A. Not at all.
- 11:37:31 15 Q. When there's certain disputed language in the claims,
- 11:37:38 16 who decides the meaning of those claims? Is it the Court,
- 11:37:44 17 or is it the inventor?
- 11:37:46 18 A. It's the Court and the Judge.
- 11:37:49 19 Q. Now, the lead inventors on the three patents, they've
- 11:37:58 20 been deposed with respect to their patents, correct, in
- 11:38:03 21 another case?
- 11:38:04 22 A. Yes.
- 11:38:05 23 Q. And you listed their depositions as materials that you
- 11:38:12 24 | considered in your expert report, correct?
- 11:38:15 25 A. Yes.

```
MR. POLLINGER: Could we see that? If we could go
11:38:16
         1
11:38:19
         2 to Paragraph 126 of Professor Madisetti's opening expert
           report.
11:38:26
        3
            Q. (By Mr. Pollinger) While we're trying to do this, why
11:39:27
            don't I follow another line of questions, and see if we can
11:39:29
11:39:34
           come back to this, in the interest of time.
                    Mr. Summersgill made a number of references to
        7
11:39:36
            Intel and Qualcomm. Do you recall that?
11:39:42
11:39:44
           A. Yes.
            Q. And Apple has a business relationship with Intel and
11:39:44
       10
11:39:50
       11
            Qualcomm. Do you understand that?
           A. Yes, that's my high-level understanding.
11:39:52
       12
            Q. Have you seen any evidence that Intel or Qualcomm has
11:39:57
       13
           protested that there's no infringement in this case?
11:40:02
       14
11:40:04
       15
           A. I have not.
           Q. Here, I think we've got your expert report -- your
11:40:06 16
           opening expert report.
11:40:11
       17
       18
                    And I was asking you whether you considered a
11:40:12
            deposition from a prior case from the first named inventors
11:40:16 19
11:40:23 20
           on these patents.
11:40:24 21
                    What do we see here at Paragraph 126 of your
11:40:27 22
           expert report?
11:40:29 23
           A. This is referring to the Imamura --
11:40:32 24
                    THE COURT: Just -- just a minute.
11:40:33 25
                   MR. SUMMERSGILL: Your Honor, I object to the
```

```
extent that he's going to say anything beyond the fact that
11:40:34
        1
11:40:38
           he cited it in his expert report. I think the question
           calls for more than that.
11:40:44
         3
                    MR. POLLINGER: I haven't done anything further,
11:40:47
            and I don't think I will, Your Honor. I don't think this
11:40:49
11:40:52
            is an issue.
        7
                    THE COURT: Restate the question then.
11:40:52
            Q. (By Mr. Pollinger) Professor Madisetti, do you state
11:40:55
11:40:57
            here in your expert report that you considered the
            deposition of the first named inventor on the '557 patent?
11:40:59
       10
11:41:05
       11
                    MR. SUMMERSGILL: Your Honor, I object.
11:41:07 12
                    THE COURT: What's the basis for the objection?
11:41:09
       13
                    MR. SUMMERSGILL: He doesn't say that he considers
            it. He says that it was simply produced by the Plaintiffs,
11:41:11
       14
11:41:17
       15
            so it's outside the scope of the report.
                    MR. POLLINGER: Your Honor, it's listed in his
11:41:21
       16
11:41:23 17
           report.
                    THE COURT: I'll -- I'll overrule that.
11:41:23
       18
11:41:25 19
                    And to the extent you want to cross him on whether
11:41:28 20
           he didn't consider what was produced, you can do that on
11:41:32 21
           recross.
11:41:32
       22
                    Let's continue.
11:41:35 23 Q. (By Mr. Pollinger) Did you consider this deposition
11:41:37 24
           transcript of the first named inventor on the '557 patent?
           A. I did, sir.
11:41:40 25
```

```
Q. And do you cite here in your deposition -- excuse me,
11:41:40
         1
            do you cite here in your expert report specific pages from
11:41:45
            that deposition transcript?
11:41:49
            A. Yes.
11:41:51
                    MR. POLLINGER: If we could, Mr. Huynh, please go
11:41:53
         5
            to Paragraph 169 of Professor Madisetti's opening expert
11:41:55
        7
            report.
11:41:59
            Q. (By Mr. Pollinger) And my question, Professor
11:42:01
        8
            Madisetti, is, did you consider the deposition transcript
11:42:10
            of Dr. Dae Won Lee, the first named inventor on the other
11:42:13
       10
            two patents, in your opening expert report?
11:42:18
        11
            A. I did, sir.
11:42:22
       12
            Q. And did you consider specific pages from that
11:42:23
       13
            deposition transcript?
11:42:29
       14
11:42:30
       15
            A. Yes.
                     THE COURT: Counsel, I need to take up a matter
11:42:36
       16
            with you briefly.
11:42:37
       17
                     I'm sorry, ladies and gentlemen, part of -- part
11:42:40
       18
            of the ordinary trial process in days gone by, I would
11:42:45
       19
       20
11:42:50
            simply call them up here to the bench where I could talk to
       21
            them quietly outside of your hearing. I can't do that in
11:42:52
            today's circumstances, so I have to ask you to step out of
11:42:57
       22
11:43:00 23
            the courtroom for just a minute, and I'll bring you back as
11:43:02 24
            quickly as I can.
11:43:03 25
                    Please leave your notebooks in your chairs, follow
```

```
all my instructions, and if the jury will retire briefly to
11:43:07
         1
            the jury room.
11:43:10
         2
                     COURT SECURITY OFFICER: All rise.
11:43:13
         3
11:43:16
                     (Jury out.)
         4
                     THE COURT: Counsel, both sides are very much
11:43:35
         5
            aware that the Court has an order in limine prohibiting
11:43:40
        7
            discussions or the injection of other litigation into this
11:43:45
            lawsuit.
11:43:48
         8
                     And we just saw big bold references from
11:43:48
            depositions taken in specific cases in specific courts, and
11:43:51
        10
            at least one of them was in this court with my initials on
11:43:55
        11
            it and case numbers. And I don't know how that's not a
11:43:59
       12
            violation of the MIL.
11:44:01
        13
                     No -- neither one of you have raised it, but I
11:44:03
       14
11:44:06
       15
            have a duty to police my own orders. And I don't
            understand how that's not in violation of what I prohibited
11:44:10
       16
            as far as injecting other litigation into this lawsuit.
11:44:14
        17
11:44:17
       18
                     Can I have a response? I mean, you're the --
11:44:20
       19
                    MR. POLLINGER: I guess --
11:44:21
       20
                     THE COURT: -- you're the one -- you called for
       21
11:44:22
            these, Mr. Pollinger.
                     MR. POLLINGER: Well, first I apologize,
11:44:23
       22
11:44:26
       23
            Your Honor. I think that's the primary -- I'm not sure
11:44:29
       24
            that's much of a response, but that -- that is my response.
11:44:32 25
                    And I believe Apple -- Mr. Summersgill, in his
```

```
examination of Professor Madisetti, brought up the fact
11:44:39
         1
            that there was a deposition in a prior lawsuit. I'm not
11:44:42
            sure that's -- that's certainly not an excuse. The primary
11:44:44
         3
11:44:49
            response, again, is -- is an apology.
                    MR. SUMMERSGILL: Your Honor, may I respond to
11:44:52
         5
11:44:54
            that?
                    THE COURT: I'll hear from Defendant on this, as
        7
11:44:54
            well, Mr. Summersgill.
11:44:55
11:44:57
                    MR. SUMMERSGILL: Your Honor, I didn't -- I did
        9
            object to it. I didn't raise the other litigation point.
11:44:59
        10
            I didn't want to raise that in front of the jury. But we
11:45:03
        11
11:45:06
        12
            do believe it is contrary to the motion in limine, and we
            would ask that it be stricken.
11:45:09
       13
                     THE COURT: Well, my intention is to bring the
11:45:12
        14
            jury back and instruct them that in the last two slides
11:45:15
        15
            shown to them, not only was there a deposition mentioned
11:45:20
        16
            but a specific other lawsuit, and they should disregard any
11:45:25
        17
            reference to any other lawsuit other than this lawsuit.
11:45:29
       18
11:45:34
        19
                    And I'm going to instruct both sides not to
        20
11:45:38
            violate my order in limine about injecting other litigation
        21
            into this lawsuit without expressly seeking and obtaining
11:45:41
            leave from the Court in advance, all right?
11:45:46
        22
11:45:49 23
                    MR. POLLINGER: Yes. Thank you, Your Honor.
11:45:53 24
                    MR. SUMMERSGILL: Thank you, Your Honor.
11:45:54 25
                    THE COURT: All right. Let's bring the jury back
```

```
in, Mr. Elliott.
11:45:55
         1
11:45:58
                     (Jury in.)
         2
                     THE COURT: Thank you, ladies and gentlemen.
11:45:58
         3
                     As you walked out, I got a message from the clerk
11:46:15
         4
            that your lunch was here. I'm surprised you came back at
11:46:18
         5
11:46:21
            all.
         6
                     Please be seated.
11:46:21
        7
                     Ladies and gentlemen, just prior to me asking you
11:46:22
         8
11:46:29
            to step out, there were slides shown to you regarding two
        9
            depositions taken in other lawsuits. And there were
11:46:33
       10
11:46:37
            specific references on those slides to other lawsuits
        11
11:46:41
        12
            involving other parties.
                     I'm instructing you to disregard anything you saw
11:46:43
       13
            on either of those slides about other lawsuits in other
11:46:46
       14
11:46:49
       15
            places. This case is about this lawsuit, not about what
            happened in other lawsuits. All right?
11:46:52
       16
                    Let's proceed.
11:46:55
       17
                     MR. POLLINGER: Thank you, Your Honor.
11:46:56
       18
            Q. (By Mr. Pollinger) Professor Madisetti, you were asked
11:46:57
       19
       20
11:47:05
            by Mr. Summersgill a number of questions regarding the '557
            patent and, in particular, with respect to source code.
11:47:08
       21
11:47:10
       22
                     First of all, the questions that Mr. Summersgill
11:47:16 23
            asked you, did any of that change your opinions on the
11:47:18 24
            patents?
            A. No, it did not. I reviewed source code, as well as --
11:47:19 25
```

```
through Mr. Jones's report, as well as I did personally.
11:47:24
         1
            went to Washington, D.C., to the law firm office and
11:47:27
            reviewed all the code myself, as well. I also relied on
11:47:32
            other documents, like product sheets and so on.
11:47:33
                     THE COURT: Pull the microphone a little closer --
11:47:36
         5
                     THE WITNESS: I'm sorry.
11:47:39
         6
         7
                     THE COURT: -- Professor.
11:47:40
                     THE WITNESS: Yes. Sorry, Your Honor.
11:47:44
         8
                (By Mr. Pollinger) Now, when I presented your
11:47:46
            Q.
            infringement opinion, we had to seal the court so that no
11:47:48
        10
            one qualified to -- no one that's not qualified to see --
11:47:52
        11
11:47:55
       12
            see the source code had to step out, and then you showed us
            the source code.
11:47:59
       13
                     When Mr. Summersgill asked you questions, he
11:47:59
       14
11:48:02
       15
            didn't ask that the court be sealed, did he?
            A. No, he did not. He didn't show me any code.
11:48:05
11:48:09
        17
            Q.
               He didn't show you any source code, did he?
               He did not.
        18
            Α.
11:48:11
11:48:12
        19
            Q. Did he give you any opportunity to explain the actual
11:48:15
       20
            source code that we went over?
11:48:17
        21
            A. No.
       22
            Q. The actual source code that we went over that you
11:48:18
11:48:21
        23
            showed us, does it show that the Apple products at issue
11:48:26
       24
            have every single part of the '557 claims?
11:48:31 25
            A. Yes.
```

```
Q. Mr. Summersgill was trying to suggest that there's some
11:48:32
         1
            other source code out there that could be relevant, but he
11:48:43
            never showed you anything else.
11:48:46
         3
                     Is there any other source code that you needed to
11:48:48
            look at to see whether the '557 patent is infringed by the
11:48:50
         5
11:48:55
            Apple products at issue.
        7
                    MR. SUMMERSGILL: Your Honor, objection, leading.
11:48:57
                    THE COURT: Sustained.
11:48:59
         8
11:49:01
                    This is redirect.
         9
11:49:04
        10
            Q. (By Mr. Pollinger) Was there any other source code
            that you needed to look at?
11:49:05
        11
           A. Not at all.
11:49:07
        12
11:49:09
       13
            Q. There was a number of questions by Mr. Summersgill
            regarding a sequence and a sequence index, and I believe he
11:49:17
       14
11:49:26
       15
            was suggesting that there was non-infringement based upon
            that, and -- but you wanted to explain.
11:49:29
        16
            A. Yes.
11:49:32
       17
               He didn't give you an opportunity to explain?
11:49:33
       18
            Q.
11:49:35
       19
            Α.
               No.
11:49:35
       20
            Q. Could you explain your opinion with regard to whether
            it matters in the '557 patent if we're looking at an actual
11:49:41
        21
       22
            sequence or a sequence index?
11:49:48
11:49:50 23
            A. It does not. If you look at Figure 3 of the patent,
11:49:57 24
            for example -- could I put up Figure 3 of the --
11:50:00 25
            O. Yes.
```

```
11:50:00
                    MR. POLLINGER: Could we get -- Mr. Huynh, could
         1
           we get Figure 3 of the '557 patent, please?
11:50:03
         2
                    THE WITNESS: The next figure, please, Figure 4.
11:50:15
         3
            And if you can blow it up slightly.
11:50:17
            A. So as you can see in this particular figure, you're
11:50:20
         5
11:50:25
            selecting a sequence by a signature number, and the
            signature number is the sequence index in the code.
11:50:29
        7
11:50:34
                    So selecting a sequence is the same as selecting a
         8
11:50:38
            sequence number. So just like if you call somebody Tom,
            you're calling that person, whether you call them by the
11:50:41
        10
11:50:43
            name or by the person itself.
        11
11:50:46
        12
                     The sequence number and the index, they represent
            calling -- selecting a sequence is the same as selecting a
11:50:51
        13
            sequence number or an index.
11:50:54
       14
            Q. (By Mr. Pollinger) Professor Madisetti, if you're
11:50:57
        15
            teaching -- you're lecturing, you're teaching a class of
11:50:59
       17
            students and you want a particular student to answer a
11:51:04
            particular question, can you select that student by name?
11:51:10
       18
            A. Yes, or by their class roll number.
11:51:13
       19
11:51:16
       20
            Q. Do you have to walk down to where the student's sitting
        21
            and grab them to select them?
11:51:21
11:51:23
       22
            A. No.
11:51:23 23
            Q. Mr. Summersgill also asked you a number of questions
11:51:33
       24
            regarding increases and decrease -- decreases, and I
            believe he was suggesting that in the Apple products this
11:51:42 25
```

```
happens one way and in the claims it's required another
11:51:45
         1
            way. But you wanted to explain your -- your -- your
11:51:48
            analysis of that; is that correct?
11:51:51
         3
                    MR. SUMMERSGILL: Your Honor, I object. Leading
11:51:54
         4
            again.
11:51:56
         5
11:51:57
                     THE COURT: Sustained.
         6
         7
                     Restate your question, counsel.
11:51:59
            Q. (By Mr. Pollinger) Professor Madisetti, in the claims
11:52:03
         8
            of the '557 patent, is there a difference with regard to
11:52:04
            the cyclic shift on increasing or decreasing?
11:52:11
        10
11:52:14
            A. The claims say increasing, but I believe Apple raised a
        11
            number of arguments about non-infringing alternatives, and
11:52:18
        12
            the alternatives were not precise or clear.
11:52:22
        13
                     So I offered an opinion saying that, to the extent
11:52:28
        14
11:52:31
        15
            I understood what Apple was trying to say, I said because
            everything is in a cycle; if you increase one way, it
11:52:35
       16
11:52:40
       17
            decreases the other way.
                     So in that sense, because it's a cyclic shift,
11:52:41
        18
            means in a circle. If you move this way, you're closer
11:52:43
       19
       20
11:52:46
            this way; and if you move this way, you're increasing in
            one way and decreasing in another.
11:52:46
        21
11:52:47
        22
                     So I said, according to Apple's non-infringement
11:52:50
       23
            argument, it's possibly infringing, as well. So this was
11:52:56
       24
            more in the context of non-infringing alternatives. But
            Apple's products satisfy the increasing strictly.
11:53:00 25
```

```
Q. Now, with regard to the '332 patent -- if we could have
11:53:06
         1
            Slide 51 from your direct examination -- there were some
11:53:13
            questions from Mr. Summersgill about what the lead inventor
11:53:17
            said to the standards setting body, and he seemed to be
11:53:21
            suggesting that the inventor was indicating that there
11:53:33
11:53:35
            really wasn't an invention here. And do you agree with the
            suggestion that there is no -- that Dr. Lee believed there
11:53:41
        7
            was no invention here?
11:53:45
         8
                    MR. SUMMERSGILL: Objection, leading.
11:53:49
                    THE COURT: Sustained.
11:53:52
       10
            Q. (By Mr. Pollinger) Professor Madisetti, on Slide 51
11:53:53
        11
           here, which is from PX-1760 that you showed us, what did
11:53:55
       12
            Dr. Lee say about his invention?
11:54:00
       13
           A. Counsel, I think the counsel from Apple was pointing to
11:54:03
       14
11:54:10
       15
           an email message with respect to asking the question, if I
           was not mistaken.
11:54:22
       16
11:54:23
       17
           Q. I believe so. And -- and we can show that, as well.
11:54:26
       18
           A. Yes.
           Q. What I wanted to ask you about was what -- what did
11:54:26
       19
       20
11:54:31
           Dr. Lee write here?
11:54:33 21
           A. Yes. He was talking about a critical problem that was
11:54:36
       22
           being solved in Exhibit 1760, and the critical problem was
11:54:42 23
           that 64,000 mobile phones had to share 100 mailboxes before
11:54:44 24
           the invention.
11:54:45 25
                   So I said here that he was pretty modest because
```

```
his invention that was a development of the standard solved
11:54:47
         1
            this critical problem, and I said the word "minor" or
11:54:51
            "nothing new" is more of an indicator of how modest he was.
11:54:53
            Q. And did you read the email that Mr. Summersgill has
11:54:59
            shown you?
11:55:04
         5
            A. I did.
11:55:06
            Q. And the "nothing new" statement that he showed you,
11:55:07
        7
11:55:13
            what is your assessment of that?
            A. It means that -- and he's only referring to a portion
11:55:16
            of his claim, not the entire invention, and even that was a
11:55:20
        10
            dramatic change, in my opinion. But, in my opinion it's
11:55:25
        11
            more a reflection of his modesty, as opposed to anything
11:55:28
       12
11:55:32
       13
            else.
            Q. Further on the '332 patent, Mr. Summersgill asked you a
11:55:33 14
11:55:47
       15
            number of questions regarding shifts and divides.
                     Is whether we're talking a shift or divide
11:55:52
       16
            relevant to whether there is infringement of the '332
11:55:56
       17
11:56:01
       18
            patent?
            A. No. A shift is a divide. And most code uses divide
11:56:01
       19
11:56:07
        20
            and shift in the same way. So when you take a number and
            shift it right, it divides it. When you shift the number
11:56:13
        21
11:56:16
       22
            left, it multiplies it. That's a standard way. I've
11:56:20 23
            written books on this topic, and that's a very common way
11:56:23 24
            of doing arithmetic.
            Q. On the same topic, Mr. Summersgill asked you about
11:56:26 25
```

```
walking, flying, or driving from Atlanta.
11:56:29
         1
                    Does the claims -- the claim here in the '332
11:56:33
            patent, does it talk about walking, flying, or driving?
11:56:37
            A. No, it does not. And, in fact, I drove from Atlanta,
11:56:40
            so I was surprised.
11:56:46
         5
11:56:49
            Q. Lastly, turning to the '833 patent, there is a lot of
            talk about rows and a lot of talk about columns and
11:56:55
        7
            row-by-row and column-by-column. And I believe you wanted
11:57:01
            to explain yourself.
11:57:06
                     So my question is -- well, first, my first
11:57:09
       10
            question is, did Mr. Summersgill's questions in any way
11:57:12
        11
            undermine your opinion on infringement?
11:57:18
        12
            A. No, it did not.
11:57:20
        13
            Q. And can you explain to us -- well, let me ask you this.
11:57:23
        14
11:57:33
       15
                     Is it important when you're talking about whether
            it's row-by-row or column-by-column to know very precisely
11:57:36
            what you're talking about?
11:57:40
       17
            A. Yes, it is. As I was saying for the 2D matrix, if you
11:57:41
       18
            look at it for the whole matrix, the mapping is row-by-row,
11:57:47
        19
11:57:52
        20
            but if you look within a single row, which is the first
            row, you start from the left and then you go
11:57:56
        21
11:57:57
        22
            column-by-column across. That's what I was saying. So in
11:58:00
       23
            my deposition, that was pointed out.
11:58:04
       24
                    The question was, what happens in the first row,
            first element and the second element? So if you could put
11:58:09 25
```

```
up that deposition testimony on Page 393.
11:58:14
        1
11:58:20
                    MR. POLLINGER: Yes, Mr. Huynh. Page 393, Lines 8
         2
           through 19.
11:58:27
        3
                    Your Honor, may I put this up on the easel?
11:59:02
         4
                    THE COURT: Turn it around and show me what it is.
11:59:05
         5
11:59:08
                    MR. POLLINGER: It's the Defendant's
         6
            demonstrative.
        7
11:59:09
                    THE COURT: All right.
11:59:09
        8
11:59:09
                    MR. POLLINGER: Thank you, Your Honor.
           Q. (By Mr. Pollinger) So, Professor Madisetti, what is
11:59:15
       10
11:59:19
           the specific question? What is specifically being talked
        11
           about here?
       12
11:59:22
           A. Yes. The question that was asked by the counsel, she
11:59:23 13
           asked me: Which resource element on Line 11 is mapped
11:59:27
       14
            first and which resource element is mapped second -- so --
11:59:32
       15
            Q. Professor, can I stop you there? Can I --
11:59:40
       17
                    MR. POLLINGER: If Your Honor allows me, can I
11:59:44
            draw on the easel, with the assistance of Professor
11:59:46
       18
           Madisetti, at the direction of Professor Madisetti?
11:59:54
       19
11:59:58
       20
                    THE COURT: Ordinarily, I let either side use a
            demonstrative that the other side puts up, but ordinarily
12:00:01
       21
12:00:07
       22
            it's a picture on a screen, and it's not altered when the
12:00:09 23
            other lawyer uses it.
12:00:11 24
                    Does the Defendant object to Plaintiffs' counsel
12:00:14 25
           drawing on its hard copy demonstrative so that it will be
```

```
1 altered?
12:00:18
                    MR. SUMMERSGILL: We do, Your Honor. We have no
12:00:19
         2
            objection to Mr. Pollinger using the demonstrative, but we
12:00:21
        3
            do object to him changing the demonstrative.
12:00:25
        4
                    THE COURT: Mr. Pollinger, you can certainly
12:00:27
         5
12:00:29
            indicate without marking on the demonstrative the direction
        7
            you get from Dr. Madisetti, but I don't want you to
12:00:34
12:00:39
            physically alter it, given that it's not a picture on the
12:00:41
            screen; it's a hard copy demonstrative.
        9
                    MR. POLLINGER: Sure, Your Honor.
12:00:45 10
                    THE COURT: So if you'll use it in that way,
12:00:45 11
12:00:48 12
           please.
12:00:48 13
                    MR. POLLINGER: I think I can use it in that way.
           I wanted to put a little dot in a particular place, but if
12:00:48 14
12:00:53 15 | that's not --
                    THE COURT: You can use a Post-it note that you
12:00:53 16
12:01:00 17 can take off.
12:01:00
       18
                    MR. POLLINGER: That's a great suggestion. Thank
12:01:00 19 you, Your Honor.
12:01:00 20
                    THE COURT: Okay. Let's proceed.
           Q. (By Mr. Pollinger) Professor Madisetti, if we look at
12:01:02 21
12:01:04
       22
            this precise question where it says: Which resource
12:01:08 23
            element is mapped first?
12:01:10 24
           A. Yes.
12:01:10 25
           Q. Can I indicate that on this chart here?
```

A. Yes, please select the square on the top left. 12:01:13 1 12:01:18 Q. Is that correct? A. Yes, that's the one. 12:01:19 3 And then the question says: Which resource 12:01:21 element is mapped second? 12:01:24 12:01:27 6 Could you put the Post-it note on the block to the right of the blue that you just did? 12:01:30 Yes. So what I was explaining is that within that 12:01:34 8 12:01:37 row, you're moving column-by-column because the first column is 0, the second column is 1, all the way to Column 12:01:42 10 12:01:47 11 No. 11. Q. Where is the first column? 12:01:48 12 A. The first column is -- is that same. The first column 12:01:49 13 is right there, that's the first column. 12:01:55 14 Q. And where is the second column? 12:01:56 15 A. Just beside that. That's right. 12:01:58 16 12:02:01 17 And so for the first row, you go from the top left, the first resource element is the first blue Post-it 12:02:04 18 note, and the second one is the -- on the right that shifts 12:02:08 19 12:02:11 20 by one column to the right. That's exactly what I said. And that's exactly how the claim also describes it. 12:02:14 21 Q. Let me see if I understand this. If we're looking at a 12:02:18 22 particular row, here's the first row? 12:02:23 23 12:02:24 24 A. Yes.

Q. The mapping goes column-by-column?

12:02:25 25

```
12:02:29
         1
            Α.
                On that row.
12:02:30
                     MR. SUMMERSGILL: Your Honor?
         2
            Q. (By Mr. Pollinger) First column?
12:02:31
         3
                     THE COURT: Just a minute.
12:02:33
         4
                     MR. SUMMERSGILL: Objection, leading.
12:02:34
         5
12:02:35
                     THE COURT: You'll have to do this in a
         6
            non-leading fashion.
12:02:37
        7
                     Restate your question.
12:02:38
         8
12:02:40
                (By Mr. Pollinger) Professor Madisetti, could you
            Q.
            guide me with the Post-its as to what I should do with
12:02:41
12:02:50
            respect to the first row?
        11
            A. Yes. With respect to the first row, the source code
12:02:51
        12
            for the Apple/Qualcomm and Apple/Intel products put Post-it
12:02:56
        13
            notes along in that first row towards the right. So you
12:02:56
        14
12:03:05
       15
            can put a third Post-it note there, and the next Post-it
            note on there, and then all the way to the end, and end on
12:03:09
        16
            the first row. End of the first row.
12:03:12
        17
                     And then you go to the beginning of the second
12:03:15
        18
            row, then you again go column-by-column across that row.
12:03:19
       19
12:03:23
       20
            And that's what the code does, and that's what I was
            explaining, because the counsel had asked me which element
12:03:26
        21
12:03:30
        22
            was mapped first, which second, and all that. And I said
12:03:33
       23
            it starts the top left, and then goes to the right
12:03:37
       24
            column-by-column.
12:03:37 25
                     So overall, the map -- the matrix -- 2D matrix is
```

```
mapped row-by-row, but within each row, it is
12:03:44
         1
            column-by-column. And so there shouldn't be any confusion
12:03:48
         2
           that the code does exactly like the claim should say, and
12:03:52
         3
            indeed the code does exactly like what the standard -- the
12:03:55
           LTE standard also says.
12:03:58
12:03:59
                Is this what you explained in your deposition?
        7
           A. Yes.
12:04:03
           Q. Could you read that to us?
12:04:03
         8
12:04:05
           A. Yes. I said -- so the counsel asked me: Which
           resource element is mapped first and which resource element
12:04:10
       10
           is mapped second sequentially?
12:04:13
        11
       12
                     I said: They're mapped column-by-column in a
12:04:17
           temporally segmented manner, which means that they're
12:04:20
       13
           ordered in time. Each column represents a unit of time,
12:04:23 14
12:04:28
       15
           and starting at the top left.
                     So that's exactly what I described here, and
12:04:29
       16
           that's exactly what I showing the Court, as well.
12:04:33
       17
           Q. You showed us an animation as part of your direct --
12:04:36
       18
12:04:40 19
           A. Yes.
12:04:40 20
           Q.
               -- your direct examination?
12:04:42 21
           Α.
               Yes.
12:04:42 22
               Is your animation consistent with this?
           Q.
12:04:45 23 A.
               Yes.
12:04:45 24 Q.
               Is this what the claims require?
12:04:48 25
           Α.
               Yes.
```

```
Q. Does this in any way establish non-infringement?
12:04:48
         1
           A. No, it does not. It actually proves what I'm saying,
12:04:53
           which is interesting.
12:04:56
            Q. Is there any question in your mind here that these
12:04:57
            three patents are infringed by Apple?
12:04:59
            A. Not at all.
12:05:01
        7
                    MR. POLLINGER: No further questions, Your Honor.
12:05:03
                    THE COURT: You pass the witness? Mr. Pollinger,
12:05:04
         8
       9 you pass the witness?
12:05:06
                    MR. POLLINGER: Yes, Your Honor, I pass the
12:05:08
       10
           witness. Thank you.
12:05:10
       11
12:05:11
       12
                    THE COURT: Thank you.
12:05:13 13
                    Mr. Summersgill, additional cross-examination?
                    MR. SUMMERSGILL: Nothing further, Your Honor.
12:05:17
       14
                    THE COURT: Okay. Then you may step down --
12:05:19
       15
                    THE WITNESS: Thank you, Your Honor.
12:05:23
       16
                    THE COURT: -- Professor Madisetti.
12:05:24
       17
                    And let's pull this demonstrative down, please.
12:05:25
       18
       19
12:05:28
                    And this is a good time to break for lunch. Five
12:05:32
       20
           minutes after 12:00.
12:05:34
       21
                    Ladies and gentlemen, please take your notebooks
            with you to the jury room for lunch. It should be waiting
12:05:38
       22
12:05:41
        23
            for you there. Please follow all my instructions,
12:05:44
       24
            including not to discuss the case among yourselves. And
           we'll try to reconvene in approximately an hour.
12:05:47 25
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With that, the jury is excused for lunch.
12:05:50
         1
                     COURT SECURITY OFFICER: All rise.
12:05:53
         2
                     (Jury out.)
12:05:56
         3
                     THE COURT: Counsel, we're going to break at this
12:05:56
         4
            point. I'd like you to take about 30 minutes, and then I'd
12:06:10
         5
12:06:13
            like you to make yourselves available to me at chambers to
         7
            see if there's any other dispute -- any disputes we need to
12:06:16
            cover so that we can keep the evidence flowing. All right?
12:06:21
         8
12:06:25
                     With that, we stand in recess.
         9
                     MR. SHEASBY: Thank you, Your Honor.
12:06:27
        10
12:06:28
                     MR. POLLINGER: Thank you.
        11
12:06:29 12
                     (Recess.)
        13
                                 CERTIFICATION
        14
        15
                     I HEREBY CERTIFY that the foregoing is a true and
            correct transcript from the stenographic notes of the
        16
            proceedings in the above-entitled matter to the best of my
        17
        18
            ability.
        19
        20
        21
            <u>/S/ Shelly Holmes</u>
                                                      8/5/2020
            SHELLY HOLMES, CSR, TCRR
                                                      Date
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